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FOREWORD

I look back upon the economic progress in the last five years with great happiness and deep humility. We made our Second Five-Year Plan in the shadow of the past. Then our problems were grave and they appeared intransigent. Our resources were small and our needs enormous. The financial and economic system was precariously poised and endangered by policies of drift. Today we look back on the progress made in the years of the Second Plan and give heart-felt thanks for what has been achieved and say ardent prayers for the years ahead when the Third Plan will be in operation and the country will be advancing into the future with fresh hopes and aspirations.

A National Plan of development embodies the economic and social philosophy of a country. The successive Five-Year Plans indicate the sense of direction and national purpose that is inherent in economic planning. A Five-Year Plan must, therefore, be viewed not only as a collection of complex facts and figures and lists of schemes but as a projection of a nation's effort to reach goals of human happiness.

There are various ways of assessing national progress. The usual measure is the increase in national income or income per head. By this measure, Pakistan has already increased its national income by about 60 per cent and will achieve a further increase of 200 per cent in the next 20 years. The advance is in geometrical progression. But figures are meaningless unless they are related to the welfare of the common man. The real index of economic development is not cold statistics, but the visible effects on the pattern of the daily life of the people. And it is here that we have to go far beyond the usual economic measurements and consider the cultural, social and religious enrichment of life, besides the material progress. And it is for this reason that economic planning has to be conceived as a part, and only as a part, of the broader social and economic frame-work which is rooted in our cultural and religious traditions.

To provide a decent life to nearly 110 million people, which number will increase by another 80 million over the next 20 years, is a vast challenge. We have accepted this challenge as a nation. We are also conscious that the path chosen by us for economic development should be guided by our own political ideals, our long-term social objectives and our proud cultural heritage. We must evolve a synthesis between economic growth and moral and spiritual values. Of course, the need of the hour is to move speedily towards a progressive, technological, industrialised society. Basic to such a society is the spirit of enquiry and criticism and it is inevitable that many traditional institutions should change in the process if they stand in the way of rapid progress. But there are parts of our heritage so valuable that they must be preserved. There is, for instance, the family life as it is organised at present with its close ties, its traditional simplicity, its warmth and depth. It will be a poor bargain if this were replaced by an impersonal urbanised society, however developed it may be materially. The emancipation of a great number of people from dire poverty in the next few decades will certainly give them greater control over their environment but it will not necessarily make them happier unless the moral, cultural and spiritual values of life are also preserved.

We, as a nation, are committed to planned development. For us, Five-Year Plans represent a concrete programme of action. We gave unstinted political support to the Second Five-Year Plan and its success owes itself largely to the economic discipline that the country was willing to accept. We are equally determined to make the Third Plan our platform for action in the economic field.

Our approach to economic planning has been pragmatic all along. It has been the constant endeavour of the government to mobilise the creative energies of the nation and to give all possible incentives for the stimulation of private initiative. The government has limited its own role to providing a suitable frame-work for the private sector and to the creation of those facilities which the private sector had neither the ability nor the willingness to develop. There have been no grand experiments in nationalisation, no fancy slogans about socialism, no undue intervention in the private sector. In fact, the government has gradually removed most of the administrative and bureaucratic controls which hampered progress of the private sector.

The result of this approach has been the rapid growth of private enterprise in Pakistan. This has certainly yielded high rates of growth, especially in recent years, but it has also led to some problems. Capitalism all over the world has already undergone a profound transformation and its character today in the Western countries is very different from the capitalism of the 18th and 19th centuries which was characterised by excessive profits, exploilation of labour and disregard of the larger welfare of society. We have to ensure that in Pakistan, too private enterprise moves towards that stage of enlightenment where making of high profits and their re-investment ceases to be the sole or even the major criterion of success and the private sector is motivated by the larger interests of society. It will be our firm policy, therefore, to prevent excessive concentration of income and wealth in the hands of a few, to distribute economic opportunities widely and so to regulate private enterprise that society as a whole benefits by it. It is our intention to humanize all such vested interests as stand in the way of a progressive, dynamic society. The feudalistic structure in the rural areas has already been humanized through land reforms. We are determined to see that such a feudalistic pattern does not emerge elsewhere, whether in the industrial field or in the social sphere. The emerging industrial class must turn its undoubted energies to efficient economic management of the country and refrain from conspicuous consumption and ostentatious living and from developing any partisan political interests so that the need for corrective action does not arise.

The ultimate aim of all our efforts in economic and social spheres can only be to move speedily towards the attainment of Islamic Socialism in Pakistan. The term Islamic Socialism is almost inter-changeable with "welfare state". In addition to the familiar welfare goals, Islamic Socialism implies that the cultural and religious heritage of the country should be preserved and not allowed to be destroyed by the ruthless pursuit of economic development. It is, therefore, a concept much broader than the "welfare state" and embraces all the phases of an individual's life.

What is basic to the establishment of Islamic Socialism is the creation of equal opportunities for all rather than equal distribution of wealth. In fact, perfect equality of incomes has never been achieved, not even in the Communist countries, because differences in aptitudes and talents make for differences in incomes even when individuals start off with equal opportunities. And this is as it should be. The important thing is that every individual must be given the fullest opportunity to develop his natural talents and that he should not be inhibited by an oppressive economic and social frame-work.

There are three corner-stones of this policy of ensuring equal opportunities to which we are committed. Firstly, it is the intention of the government to provide universal free primary education to all. Secondly, it is our aim to ensure a system of merit scholarships at the secondary education level. Thirdly, we intend to provide competitive entry to jobs at all levels. These objectives are already embodied in the Constitution. Their achievement will automatically ensure that a child gets the maximum possible opportunity for advancement irrespective of his economic or social class.

Of course, our objectives go far beyond providing equal opportunities in the field of education and jobs. The government is also committed to providing all the welfare facilities which are by now a common feature in the Western world. Our resources will not permit us to provide the kind of health services and social security benefits which are prevalent in U. K. and Sweden today but we certainly intend to cover a large part of the population with social security legislation over the period of the

Perspective Plan (1965-85). Thus, the coverage of health services will be increased about ten times and every family provided with a decent house to live in by constructing about 16 million new housing units in the next 20 years.

The government is also determined that a certain minimum income should be assured to every citizen. At present, about 40 per cent of the total households in East Pakistan and about 24 per cent in West Pakistan obtain a monthly income of less than Rs. 100. Such a maldistribution of income is totally unacceptable. We are determined to ensure that no household should have a monthly income of less than Rs. 100 by 1985. This will at least provide the minimum facilities of life and protect a large segment of the population against the constant fear of privation and hunger.

One of the fundamental objectives of our policy is to bring about a better cohesion beween East and West Pakistan in all fields—economic, political and social. We are firmly committed to eliminate disparities in *per capita* income in the shortest possible time and this has been made a specific objective of the Perspective Plan. But the process of national integration has to extend far beyond the economic field and must embrace all the phases of an individual's life. At the same time, we should also take advantage of the possibilities of regional co-operation on a broader scale, particularly with the neighbouring Islamic countries. The recent moves towards regional economic co-operation between Pakistan, Iran and Turkey should be looked at in the context of this long-term goal of extending our regional ties as broadly as possible.

This is only an Outline of the Third Plan. This is not the final Plan. It is being released to elicit public opinion. Economic planning is an exercise in which not only the technicians but the whole nation participates. We are already bringing about a democratisation of the planning and implementation process through the recent decentralisation of development functions of the government. This is creating an unprecedented enthusiasm for planned economic development. Particularly, the Rural Works Programme, which has carried development to the very heart of the country-side, has caught the imagination of the people. We are convinced that it is only through a mobilisation of the creative energies of the entire nation that economic planning can really succeed.

MOHAMMAD AYUB KHAN,
N. PK., H. J., F. M.,
President of Pakistan.

27th August, 1964.

PREFACE

"Hope builds sooner than knowledge destroys" may be said truly of Asia's millions; and so, despite undiminished poverty and unrealized promises of affluence, disappointment has been contained. But they live on the edge of great anxiety and might easily be pushed into despair. Disappointments are shared by all Asian people. It is not that the governments of the Asian countries have not tried; it is just that economic development has come to be regarded as the only index of a country's progress, freedom's reason, the goal, the aim and the object of every effort and the only test by which to judge governments. And, thus, the nations' and the individuals' values have come to be assessed with economic measurements only. It is inevitable that with this concentric attention on economic growth, its slow pace should create conflicts.

In Pakistan the economy has moved, *albeit* tardily, in the direction of self-sustaining viability. Besides the problems encountered commonly, we have additional ones arising out of the geographical separation of East and West Pakistan, the wide variation in the traditions and experience of the two zones, the confrontation between technical feasibility and political urgency, and at times these problems have become baffling.

By the end of the Second Five-Year Plan, Pakistan will have covered a long stretch of the arduous road of economic development, and new horizons will become clear and well-defined. A review of the progress achieved so far can help us not only in setting the targets for the new plans, but also in appraising the past strategies and in determining the changes which must be made to suit the circumstances of the future. It is inevitable that in the early years of its growth, a developing country should grope through dark and unknown alleys in search of both paths and goals. In the mid-twentieth century, when colonialism gave way before the drive towards emancipation of the Asian and African nations, none of these countries including Pakistan, was familiar with the techniques of development planning. Moreover, as we have learned since, there was little relevant experience available in the advanced countries on which we could rely.

The problems of economic growth and development have attracted widespread attention in recent times. But the experts agree as rarely in this sphere as they do in any other field involving complex issues having their roots deep in the infinite richness and variety of human mind. We are told by one school that if only savings were increased and invested economically, all would be well. Others again put their faith in the modern heroes—entrepreneurs, managers and technicians.

And yet another school of thought seeks panacea in a strategy which will influence institutions in the society as a whole and thus modify the human attitudes which are widely held to be hampering progress.

The truth is that there is much to be learned from these strategies and these are not mutually exclusive. Indeed, the study of a number of development cases in depth has brought out a general theory of evolution which chalks out both the stages which are generally traversed by the economy in its growth, and elaborates a host of considerations, which give to those charged with the arduous but stimulating responsibility for planning development, very useful insights. Growth theories, however, do not provide a ready made answer for specific countries and problems. For every nation has a unique development landscape, and the correct solution of the development problem has perforce to be unique in each individual case. The planner can choose at random only at his own peril.

The framework of Pakistan's Third Plan is determined by its long term economic, political and social objectives and, within these objectives, by the expected availability of resources and the need for internal consistency.

In our approach to the composition of the programme, we have tried to emphasize selectivity. Our resources—human and material—are too meagre to allow us to try to spread development too thin. We are, therefore, subjecting our projects to the closest scrutiny, in order to have only those which have the highest economic justification in terms of our objectives. We are concentrating on a number of 'growing points' with a view to spreading development without sacrificing economic efficiency. And we are putting special emphasis on industry, the most dynamic sector in our economy and the one most likely to spread new techniques and attitudes which are at the heart of the development process. It is in this sector that we hope for the decisive breakthrough.

Within the industrial sector itself, the major emphasis must be placed on the development of capital goods industries. This is a corollary of the emphasis on the reduction in the dependence on foreign assistance in the foreseeable future. Furthermore, it is politically easier to protect an expanding heavy industry sector from consumption pressures than a growing consumer goods sector. This consideration is particularly important because consumption pressures are likely to increase as higher incomes are generated in future plans, while there is a need for channelling a very high proportion of the additional incomes into domestic savings and reinvestment. The development of capital goods industries ensures a high rate of saving by denying the current generation some of the goods that it would like to have for immediate consumption.

It is our intention to move in the direction of a 'welfare state' with efficiency and despatch. The term 'welfare state' has a well-accepted connotation which in our country would be accepted as synonymous and inter-changeable with 'Islamic Socialism'. How fast we can progress towards this goal depends on the availability of resources which can be spared from directly productive activities without impairing the minimum rate of economic growth which we must achieve to support distribution programmes.

Our social welfare programmes are, by no means, unambitious. By 1970, we expect to extend medical facilities to nearly 40 per cent of the population, including 33 million people in rural areas. By that time, most parts of the country should be covered by the malaria eradication programme which is expected to be completed in 1974. All these medical facilities will be provided free of cost by the Government. They will be supplemented by health insurance schemes relating to industrial workers and others which are in various stages of development. A beginning has also been made in the field of medical social work ; it is expected that this programme will gather momentum during the Third Plan period.

The Social Insurance Legislation of 1962 provides for insurance against employment injury, maternity and sickness. Its implementation is being worked out by the Provinces. An integrated national insurance system, covering the provisions of this legislation together with the provisions of superannuation benefits through pooling and extension of existing provident funds, should mature during the Third Plan period. It is difficult, however, to foresee in the near future an unemployment insurance scheme of general scope in view of the vast nature of the under-employment problem and our limited capacity to afford such a venture.

In the field of education, 70 per cent of the children in the age-group of 5 to 10 years will be attending primary schools by 1970. The cost of primary education will be equally shared between the Government and the local communities. Considerable progress is to be made in the field of technical education to equip ourselves for the industrial society of tomorrow. During the Third Plan period, we expect to produce 5,000 engineers and 23,000 technicians, trained up in engineering institutions including polytechnics. Vocational courses will be introduced at the middle and high levels of secondary education and science education emphasized at the higher levels in order to feed engineering and medical colleges and polytechnics.

This is perhaps the maximum that the nation can afford in the field of social services in the five years of the Third Plan without diverting resources from needs which are far more pressing.

Economic development always entails profound social changes, the speed of which varies according to the attitude of the community and its political leadership towards change. It can be brought about either through a radical revolution or in a slower evolutionary manner. Pakistan has adopted the latter course in order to avoid excessive hardships and possible errors of radicalism. As a result, even when our ultimate goals are not so rigidly defined because of the evolutionary philosophy that we follow, there is no doubt that all our economic and social policies are leading the country towards Islamic Socialism.

In the following pages, an effort has been made to sketch out the strategy, structure and dimensions of the Third Five-Year Plan. One purpose is to indicate the general framework within which detailed work can begin. Another is to raise important issues of philosophy and strategy of the Third Plan which we believe should be debated earnestly and at length througout the country. Preparation of the Third Plan is not something to be left to "the planners". Rather, it should be a democratic process in which the nation as a whole reviews its past development, surveys the problems ahead, and then collectively plans its attack on the problems with which it is faced.

As I said in my statement before the National Economic Council on 24th May, 1963, the Third Plan will be crucial in Pakistan's history. The Second Plan has squarely launched us on the road to economic progress. There has been a spurt in the rate of growth. A widespread interest in development has been kindled. There is now a fuller awareness of the development problems. What the Third Plan will show is how fast the country can develop, what resources of courage, sacrifice, of wisdom and of endurance we as a nation can muster in the name of war against poverty.

The answer will decide our social, economic, and political future for many years to come. If we can make the effort, and if we can maintain a rising momentum of development in the Third and Fourth Plans, then there is every hope that sufficient impetus will be generated to carry us to a prosperous and stable Pakistan. But if we falter now, the rising flood of population growth will overwhelm what development we have achieved, with incalculable consequences for the future.

SAID HASAN, H.Q.A.,
Deputy Chairman,
Planning Commission.

20th August 1964.

CHAPTER 1

REVIEW OF PLANNED DEVELOPMENT

The First and Second Five-Year Plans marked definite stages in the country's economic progress. The concept of planning was in fact introduced with the Colombo Plan in 1950. The First Plan (1955-60) and the Second (1960-65) refined this concept and established the institutions through which planning could be effectively implemented. Both the Colombo Plan and the two subsequent Plans had as their main purpose the building up of infra-structure of the economy by initiating institutional reforms which would facilitate uninterrupted economic expansion. In retrospect, the general lines of advance which these Plans proposed still appear to be sound. The First Plan was perhaps too optimistic in certain respects and it also suffered from political instability and apathy of governments towards planned development. The Second Plan, however, has achieved dramatic success and all the key economic indicators show unmistakably rapid progress.

I. GROSS NATIONAL PRODUCT

2. In the fifteen years of planned development (1950—65), Gross National Product will increase by about 60 per cent (*see* Table 1).

TABLE 1

Gross National Product and Per Capita Income

(1959-60 prices)

	1949-50	1954-55	1959-60	1964-65	Annual compound rate of growth (%)	
					1949-50/ 59-60	1959-60/ 64-65
G.N.P. at factor cost (Million Rs.)	24,840	27,900	31,610	39,940	2·5	4·8
National income (Million Rs.).	23,300	26,100	29,500	37,250	2·4	4·8
Population (Million) ..	79	88	99	113	2·3	2·6
Per capita income (Rs.) ..	295	297	298	330	0·1	2·0

Note.—The sources of all the statistical tables in this chapter are mentioned in Appendix B Figures for 1964-65 are extrapolated trends.

3. For purposes of economic analysis, this period of 15 years falls into two distinct sub-periods, from 1950 to 1960 and 1960 to 1965. During the 1950's the GNP is estimated to have increased at an annual rate of 2.5 per cent and this increase was being nearly offset by population growth so that the net improvement in *per capita* incomes was quite insignificant. The later period (1960-65) will end up with a trend growth rate of over 5 per cent. The change is a decisive one. Whereas during the first ten years the absolute increase in *per capita* income was only Rs. 3, in the later five-years it would be about Rs. 32. What is more important is the implication for the future. The 2.5 per cent growth rate achieved during the first ten years would have doubled the GNP in 28 years, whereas the recent growth rates would double it in 15 years. It is with this background of accelerated growth rates that the planners are now confidently predicting an average annual growth rate of 6.2 per cent for the period 1965 to 1985 which would double the GNP in 11 years and triple it in the period of the Perspective Plan (1965—85). It is by this process of successive readjustments in targets that the time for reaching self-sustained growth is progressively reduced.

4. An analysis of the growth rate in GNP presented in Table 2 shows that industry has been the leading sector in the economy :

TABLE 2

Components of the Gross National Product

(Million Rs. ; 1959-60 prices)

Sector	1949-50	1954-55	1959-60	1964-65	Annual compound rate of growth (%)	
					1949-50/ 59-60	1959-60/ 64-65
Agriculture	14,860	15,800	16,330	19,000	1·0	3·1
Manufacturing	1,740	2,500	3,430	5,100	7·0	8·3
Large-scale	(370)	(960)	(1,650)	(2,950)	16·1	12·3
Small-scale	(1,370)	(1,540)	(1,780)	(2,150)	2·7	3·9
Services	8,240	9,600	11,850	15,840	3·7	6·0
Total ..	24,840	27,900	31,610	39,940	2·5	4·8

The annual growth rate of large-scale industry over the last 15 years has been as high as 15 per cent. In fact, the growth rate was higher during the first ten years (about 16 per cent per annum) since a start was made from a very low base. The rate of industrial growth came down in the last five years to about 12 per cent per annum. Even such high growth rates in the large-scale industrial sector did not make a significant impression on the over-all growth rate because of the small weight of this sector in the total national product. The annual growth rate in agriculture was only 1.6 per cent over the last 15 years which fell short of the population growth rate of 2.5 per cent. The slow rate of growth in agriculture limited the availability of exportable surpluses in agricultural raw materials as well as tended to dampen the demand for industrial products since purchasing power in the rural areas was not increasing at a fast enough rate. The widely divergent growth rates in agriculture and industry during these 15 years did make economic progress less harmonious than it should have been and exercised an adverse influence on the over-all rate of growth. After some of the early import substitution possibilities for consumers goods were exhausted, the pace of industrial development had to depend on the expansion of the domestic market, particularly in the rural areas, which was restricted by the slow growth of agriculture. Fortunately, the growth rate in agriculture has improved recently. Whereas annual growth rate in agriculture was only 1.0 per cent during 1950-60, it is estimated to have increased to 3.1 per cent during 1960-65. So far as the contribution of services (like transport, banking, trade, government etc.) is concerned, it tended to increase at a rate faster than the increase in national income.

5. The divergent growth rates in agriculture, manufacturing and services led inevitably to a structural change in the economy which appears to be fairly pronounced despite the short span of time analysed here (*see* Table 3) :

TABLE 3

Structural Change in the Gross National Product

(Percentage share in the GNP)

Sector	1949-50	1964-65
Agriculture	59·7	47·5
Manufacturing	7·0	12·8
Large-scale	(1·5)	(7·4)
Small-scale	(5·5)	(5·4)
Services	33·3	39·7
	100·0	100·0

The contribution of the agricultural sector to the GNP will decline from about 60 per cent in 1949-50 to about 48 per cent in 1964-65, whereas that of manufacturing will increase from 7 per cent to 13 per cent, and of services from 33 per cent to 40 per cent. The most decisive increase has been in the contribution of the large-scale industrial sector. Its share has increased from 1.5 per cent to 7.4 per cent in 15 years. Within the industrial sector, the share of large-scale industry as compared with small-scale industry would increase from about 20 per cent in 1949-50 to about 60 per cent in 1964-65. This is a trend which is likely to continue. The economy is becoming progressively industrialised and its preponderant dependence on agriculture is diminishing.

6. The structural change in the economy has profound implications for future growth rates. As the relative weight of large-scale industry increases, its high rate of growth is likely to have a decisive influence on the aggregate rate of growth. Besides, a certain degree of firmness is being imparted to the growth rates as the share of the non-agricultural sectors is increasing in the economy and as the growth rate of these sectors is relatively more stable than that of the agricultural sector. It is also clear from this analysis that if growth rates in the agricultural sector are stepped up in future plans, the economy can look forward to an era of unprecedented economic progress.

II. INVESTMENT

7. There has been a remarkable acceleration in gross investment in the last 15 years. Gross investment was about 4 times as high in 1964-65 as in 1949-50 in terms of constant prices and without including expenditure on Indus Basin replacement works. As a result, the investment in 1964-65 amounted to 16 per cent of the GNP as against 6 per cent in 1949-50.

TABLE 4

Gross Investment : Size and Distribution

(Million Rs. ; 1959-60 prices)

Type of Investment	1949-50	1954-55	1959-60	1964-65
Fixed monetised investment	1,150	1,830	2,600	5,300
Public	(450)	(900)	(1,710)	(3,100)
Private	(700)	(930)	(890)	(2,200)
Non-monetised investment	350	370	400	450
Rural works programme	—	—	—	400
Changes in stocks	50	150	400	250
Total investment ..	1,550	2,350	3,400	6,400
Investment as a % of GNP	6·2	8·4	10·8	16·0

8. The rate of increase in investment has been rather uneven during the period under review. The pace rose rapidly prior to 1955, slowed down during 1955—60 and then rose sharply again. The absolute increase during the five years of the Second Plan was about 60 per cent more than that over the ten preceding years.

9. The share of public and private sectors in total investment has also undergone a great change. The share of public sector in total investment increased from about 30 per cent in 1949-50 to about 55 per cent in 1964-65 (*see* Table 5). This marked shift of emphasis towards the public sector was found necessary to step up the pace of development and to balance its structure. It did not imply any neglect of the private sector : in fact, private investment increased at an annual rate of about 7 per cent over this period. It only indicated the greater responsibility which the public sector had to shoulder, within the framework of planned development, by way of creation of basic infra-structure which the private sector required for its accelerated development. The major shift in the shares of public and private sectors in investment is an interesting characteristic of this earlier phase of development.

TABLE 5

Relative Share of Public and Private Investment

(Million Rs. ; 1959-60 prices)

Type of Investment	1949-50	1954-55	1959-60	1964-65	Annual compound rate of growth
Public investment	450	900	1,710	3,500	14·7
Private investment	1,100	1,450	1,690	2,900	7·0
Total investment	1,550	2,350	3,400	6,400	9·9
Public investment as a % of total investment	29	38	50	55	

10. Most of the investment during this period has gone into the creation of economic and social over-heads. In fact, as much as 60 per cent of the total investment during this period was devoted to the expansion of facilities in the fields of water and power, transport and communications, housing, education, health and other social services (*see* Table 6). One of the important shifts in emphasis that is noticeable from a study of the sectoral distribution of investment during this period is the gradual increase in the share devoted to agriculture (from 6 per cent in the 1950-55 period to 15 per cent in the Second Plan, including works programme),

and an effort to curtail the high expenditure on housing (from 22 per cent in the 1950-55 period to 15 per cent in the Second Plan). There has also been an increase in emphasis on the development of water and power resources and the extension of transport and communication factilities because the inadequacy of these two was the main impediment to smooth economic growth. As a result of these investments, considerable infra-structure has already been built, though it needs further strengthening in the case of East Pakistan.

TABLE 6

Distribution of Investment by Economic Sectors

(Percentages)

Sector	Pre-Plan (1950-55)	First Plan (1955-60)	Second Plan (1960-65)
Agriculture	6	7	12
Water and power	13	17	19
Industries, fuels and minerals	36	31	27
Transport and communications	14	17	18
Physical planning and housing	22	20	15
Education	5	6	4
Health	3	2	2
Social welfare and manpower	1	Neg.	Neg.
Works programme	Nil	Nil	3
Total	100	100	100

11. As mentioned above, a large proportion of the development outlay has been on the expansion of the country's economic and social infrastructure, the full impact of which on the growth of income and consumption will become visible after sometime. The improvement in the framework of development is, however, already apparent. Water and land development programmes up to the middle of 1962 had brought 2.1 million acres of new land under cultivation while improving the supply of water to 7.6 million acres of old land. The installed electricity generating capacity increased from 143 megawatts in 1947-48 to 1,177 megawatts in 1961-62. The mileage of superior type roads increased from 5,706 in 1948 to 11,135 in 1964, while the mileage of other types of roads increased from 11,547 to 55,130 during the same period. The number of motor vehicles went up from 25,435 in 1947 to around 118,000 in 1961. The number of post offices increased from 6,474 in 1947-48 to 10,800

in 1961-62, while the number of telephones during the same period rose from 15,283 to 102,000.

III. DOMESTIC SAVINGS

12. The last 15 years have also witnessed a considerable increase in domestic savings though it was by no means as fast as the increase in investment. Whereas investment increased at an annual rate of about 10 per cent, increase in domestic savings was at the rate of about 6 per cent (*see* Table 7)

TABLE 7

Gross Domestic Savings

(Million Rs. ; 1959-60 prices)

Form of Savings	1949-50	1954-55	1959-60	1964-65
Public savings*	450	620	300	1,400
Private savings	1,050	1,380	1,600	2,400
(Corporate)	(450)	(500)	(750)	(1,400)
(Non-corporate)	(600)	(880)	(850)	(1,000)
Total ..	1,500	2,000	1,900	3,800
Average rate of savings (%)	5·8	7·2	6·0	9·5
Marginal rate of savings (%)		17·9	−2·7	22·8**

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*The concept of public savings is the total mobilization of domestic resources by the public sector to finance public investment. Thus, it equals public investment minus foreign assistance received in the public sector.

**This is in 1959-60 prices. The figure is somewhat lower in 1964-65 prices.

The domestic savings will increase from less than 6 per cent of the GNP in 1949-50 to about 9.5 per cent in 1964-65. The marginal rate of savings for the entire period will be about 15 per cent, implying that about one-seventh of the additional income will be saved and reinvested. The saving effort would have looked even more respectable but for the decline in domestic savings during the First Plan period. This was partly due to the fact that the private sector did not get full opportunity to invest all its potential savings owing to a frustrating array of economic controls. The acceleration in savings, both during the 1950-55 period and the Second Plan, was fairly sharp because of the textile boom in the earlier period and the withdrawal of most of the direct administrative controls and introduction of liberal import policy in the latter.

13. A significant feature of the period under review is the sharp increase in public savings, from Rs. 450 million in 1949-50 to Rs. 1,400 million in 1964-65. Most of this increase has come about in the Second Plan period when additional taxation amounting to about Rs. 1,800 million has been levied and strict financial control exercised on the increase in non-development expenditure. The increase in public savings during the Second Plan period is all the more remarkable because very little of it has been mobilised through deficit financing. This increase is in line with the growing requirements of the public sector and the need to reduce the element of foreign financing in the public sector programmes.

IV. FOREIGN ASSISTANCE

14. As already pointed out above, the increase in domestic savings has not kept pace with the increase in investment; the need for foreign assistance has consequently been increasing over the last 15 years. From a study of Table 8 below, it becomes clear that foreign assistance, which made a small contribution till 1955, increased to 4.7 per cent of the GNP in 1959-60 and to 6.5 per cent in 1964-65. Its share in the financing of total investment increased from about 3 per cent in 1949-50 to about 41 per cent in 1964-65. Foreign assistance, as such, played quite a decisive role in accelerating the rate of investment in the economy and in raising growth rates. Most of the foreign assistance in the first ten years became available in the form of either grants or loans repayable in rupees. After 1960, however, almost all the foreign assistance, except P.L. 480, has assumed the character of loans repayable in foreign exchange. As a result, the debt servicing liability of the country has increased rapidly, from Rs. 80 million in 1959-60 to about Rs. 300 million in 1964-65.

TABLE 8

Role of Foreign Assistance

(Million Rs. ; 1959-60 prices)

	1949-50	1954-55	1959-60	1964-65
Gross investment	1,550	2,350	3,400	6,400
Gross domestic savings	1,500	2,000	1,900	3,800
Foreign assistance	50	350	1,500	2,600
Foreign assistance as a % of GNP ..	0·2	1·3	4·7	6·5
Foreign assistance as a % of total investment	3·2	14·9	44·1	40·6

VI. STRUCTURAL CHANGE

15. Though a period of 15 years is not sufficiently long to form the basis of a reliable analysis of structural change in an economy, one can already see the trend of this change in various factors such as the GNP, rate of investment and saving, of exports and imports, and finally in employment. The contribution of the industrial sector to the GNP has increased sharply as the economy has become progressively diversified. The same diversification is apparent in the pattern of exports and imports. Whereas the share of manufactured goods in total foreign exchange receipts was only 1 per cent in 1951-52, it will increase to 30 per cent by 1964-65. The earnings from invisibles, in the form of travel, remittances etc. will also increase from 10 per cent of the total earnings in 1951-52 to 18 per cent in 1964-65 (*see* Table 9).

TABLE 9

Composition of Foreign Exchange Earnings

(Percentages)

	1951-52	1954-55	1959-60	1964-65
Primary goods	89	88	63	52
Manufactured goods	1	3	25	30
Invisibles	10	9	12	18
Total ..	100	100	100	100

The preponderant dependence of the economy on the export of agricultural products has been reduced, from nearly 90 per cent in 1951-52 to about 52 per cent in 1964-65. This is an important change as it will protect the economy from extreme fluctuations in exports from one year to another.

16. In respect of imports, the change has been towards much larger imports of capital goods and raw materials for capital goods (*see* Table 10). In fact, the proportion of consumer goods imports declined sharply from 46 per cent in 1951 to 23 per cent in 1964-65. Excluding consumer goods imported under PL 480 programme, only about 11 per cent of total imports constitute consumer items at present. This trend reflects the import substitution of consumer goods through the growth of domestic industrial capacity. A similar substitution for raw materials for consumer goods is also visible since intermediate products like yarn were increasingly produced by domestic industry. The import of capital goods and raw materials for capital goods has increased dramatically, from 27 per cent in 1951 to 63 per cent in 1964-65, reflecting the development orientation given to the import structure over the last 15 years.

TABLE 10

Composition of Imports

(Percentages)

	1951	1956	1960-61	1964-65
Consumer goods	46	35	32	23
Raw materials for consumer goods ..	27	12	11	14
Capital goods	20	36	42	47
Raw materials for capital goods	7	17	15	16
Total ..	100	100	100	100

Note. Government imports are not included in 1951 and 1956.

17. The country has also become progressively urbanised over this period. Only about 10 per cent of the population lived in urban areas in 1950. The percentage will have increased to about 15 by 1965. In absolute numbers, the population of the urban areas has more than doubled during this period. The progressive industrialisation of the economy is also reflected in the employment pattern. The increase in jobs in the non-agricultural sector is proceeding at a rate much faster than in the agricultural sector (*see* Table 11).

TABLE 11

Increase in Population, Labour Force and Urbanisation

(Million)

	1950	1955	1960	1965
Total population	79.0	88.0	99.0	113.0
Rural	71.0	78.0	86.5	96.0
Urban	8.0	10.0	12.5	17.0
Percentage of urban population.	10.1	10.6	12.6	15.0
Labour force	26.0	29.5	33.0	37.2
Agricultural	20.0	22.0	23.0	24.5
Non-agricultural	6.0	7.5	10.0	12.7

18. The increase in industrialisation and trade is also reflected in the growth of financial institutions. The bank offices have multiplied about 6 times. The bank credit showed an increase from about Rs. 500 million in 1950 to nearly Rs. 5,000 million in 1964. Though it is difficult to give any quantitative estimates, the economy is becoming increasingly monetized judged by all the fragmentary evidence that is available. The strengthening of financial super-structure is particularly impressive over the period of the Second Plan. The main question that is arising currently is the distribution of bank credit by economic sectors, geographical regions and personal income groups. It is quite clear from the recent experience that the distribution of bank credit will have to be related more closely to the planned objectives of the country.

VIII. REGIONAL DEVELOPMENT

19. An effort has been made in the last 15 years, and particularly the last five, to accelerate the pace of development in East Pakistan. As can be seen from Tables 12 and 13, the acceleration has been particularly fast during the Second Plan period.

TABLE 12

Rate of Growth in East and West Pakistan

(Million Rs ; 1959-60 prices)

	1949-50	1959-60	1963-64	Annual compound growth rate (%) 1949-50 to 1959-60	Annual compound growth rate (%) 1959-60 to 1963-64
*National income**					
East Pakistan ..	11,100	13,500	16,350	2·0	4·9
West Pakistan ..	11,400	15,100	18,150	2·8	4·7
Total ..	22,500	28,600	34,500	2·4	4·8
Per capita income (Rs.)					
East Pakistan ..	252	250	273	Neg.	2·2
West Pakistan ..	326	336	363	0·3	2·0
Total ..	285	289	314	0·1	2·1

*Provincial incomes do not add up to national totals given in Table 1 owing to omission of unallocable incomes.

20. The above table is based on the latest estimates of the Central Statistical Office. It clearly brings out the dramatic change that is taking place in East Pakistan. Whereas in the ten years from 1949-50 to 1959-60 the regional income of East Pakistan increased at an annual rate of 2.0 per cent and was more than matched by the increase in its population, the growth rate jumped up to 4.9 per cent in the first four years of the Second Plan. From a position of a declining *per capita* income till 1959-60, East Pakistan is now experiencing a net improvement of 2.3 per cent in its *per capita* income and a rate of growth slightly higher than that of West Pakistan. Similarly, the rate of increase in public sector expenditure was slightly higher in East Pakistan during the first ten years but it would be twice as fast in East as in West Pakistan during the recent four years (*see* Table 13). The share of East Pakistan in total Government expenditure has already risen from 26 per cent in 1949-50 to 48 per cent in 1963-64 and is likely to be higher than 50 per cent in the last year of the Second Plan. The strategy implicit in these numbers is fairly clear. The growth rate in both the regions is being stepped up but at a much sharper rate in East Pakistan so as to enable it to reduce the disparity in incomes between the two provinces.

TABLE 13

Public Sector Development Expenditure

(Million Rs. ; current prices)

	1949-50	1959-60	1963-64	Annual compound growth rate (%) 1949-50/1959-60	Annual compound growth rate (%) 1959-60/1963-64
East Pakistan ..	84	675	1,890	23·5	29·5
West Pakistan ..	238	1,195	2,000	17·5	13·8
Total ..	322	1,870	3,890	19·2	20·0

Note.—The table gives different figures from Table 4 because it includes recurring development expenditure and is expressed in current prices.

VIII. CONSUMPTION TRENDS

21. The impact of economic progress during the last 15 years on the common man may not yet have been very marked, but a general improvement is already visible. Between 1954-55 and 1961-62, the *per capita* consumption of foodgrains increased by 17 per cent, refined sugar by 14 per cent and raw sugar by 22 per cent, tea by 64 per cent and cigarettes

by 146 per cent. The *per capita* consumption of cotton fabrics increased by 20 per cent and of artificial silk by 15 per cent. The *per capita* consumption of paper—an indirect index of the country's educational progress—increased by about 200 per cent. The improvement in transport is reflected by the increase in *per capita* consumption of tyres and tubes by 45 per cent, and of motor spirit by about 60 per cent. Progress in construction resulted in a 74 per cent increase in the *per capita* consumption of cement and a spectacular increase of 460 per cent in the *per capita* consumption of iron and steel.

22. But there are significant deficiencies too. The common man still lives in extremely poor conditions. The *per capita* income is very low. The average consumption of food is below acknowledged nutritional standards. The consumption of cloth at around 14 yards *per capita* is small. Housing is distressingly deficient ; the present shortage is estimated to be of the order of one million dwellings in urban areas and may be considerably larger in rural areas. The percentage of literacy in the country is about 15. and only about 45 per cent of primary school-age children are in schools ; there is only one doctor per 7,000 persons ; potable water supply is available to about 6 per cent of the population and even this is generally inadequate in both quantity and quality ; the percentage of deaths among mothers and infants in the country is still high.

IX. EMPLOYMENT

23. A not very satisfactory aspect of the economy is the situation regarding employment. It is difficult to make any precise estimates of the increase in employment over the last 15 years but it is quite apparent that there is widespread under-employment in the rural areas. Rough estimates indicate that such under-employment in the rural areas amounted to approximately 5 million idle man years in 1950 and will be nearly 8 million in 1965. The estimated increase in unemployment by about 3 million in 15 years shows that only about 70 per cent of the additional labour force during this period has been gainfully absorbed by economic progress of the country. Recently, the introduction of the Rural Works Programme has demonstrated that substantial employment can be created by modest capital expenditures and also in areas where it is needed urgently. The acceleration of this programme may be one of the ways in which employment situation can be relieved in future. Of course, more rapid growth of the economy in future Plan periods by itself will imply a faster rate of increase in employment opportunities.

X. PRICE TRENDS

24. The trend of prices was fairly uneven during the period under review. The deflator used by the Central Statistical Office in its national income estimates shows a price decline of about 15 per cent between 1950 to 1955, and then a sharp price increase of about

40 per cent during 1955 to 1960. (*see* Table 14). This trend is also confirmed by the general cost of living indices constructed for industrial workers by the Central Statistical Office. It appears that in the first five years of the period under review, the prices declined as the Korean boom of 1950-51 petered out. The prices started rising again during the First Plan period, especially as a result of liberal recourse to deficit financing. The price increase under the Second Plan, however, has been fairly modest, averaging about 2 to 3 per cent per annum. These price trends are also confirmed by the analysis of the increase in money supply. The annual rate of increase in money supply which was around 7 per cent during 1950—54, accelerated to 10 per cent during 1954—58, was brought under control and reduced to 3 per cent during 1958—62 when the monetary overhang was worked off. Though the price indices are still unsatisfactory, they do show that the inflationary tendencies, which were manifesting themselves in the late 1950's, have been brought under control and economic growth is now proceeding side by side with relative price stability.

TABLE 14

Price and Cost of Living Indices

	1954-55	1959-60	1962-63	Annual compound rate of increase (%)	
				1954-55 1959-60	1959-60 1962-63
Cost of living index of industrial workers (C.S.O.)					
1. Karachi ..	107	125	128	3·2	0·8
2. Lahore ..	103	119	130	2·9	3·0
3. Narayanganj ..	84	117	126	6·8	2·5
National income deflator (C.S.O.)	86	117	128	6·3	3·0
National income deflator (I.D.E.)	79	118	..	11·8	..
Wholesale price index (I.D.E.)	70	122	..	8·3	..
Whoesale price Index (C.S.O. 1956-57=100).	..	105	110	..	1·6

C.S.O. = Central Statistical Office.
I.D.E. = Institute of Development Economics.

XI. CONCLUSION

25. In retrospect, the general lines of advance proposed in the First and Second Plans still appear to be sound. However, it is now apparent that the First Plan was over-optimistic in certain respects and its implementation seriously suffered because of the absence of adequate Government support for the planning process. In spite of the fact that the results of the First Plan fell short of targets, the Plan succeeded in creating considerable growth potential in the economy by building up economic and social overheads. Notable gains were registered in electric power, railways, ports, communications, certain types of industry and some of the water control projects. Perhaps the most significant improvements during the First Plan period were organisational and institutional. Many new agencies were set up, training facilities were expanded and important investigations and surveys initiated. Significant improvement also took place in the climate for economic growth, making accelerated development possible during the Second Plan period. The conspicuous failures of the First Plan were in the fields of agriculture and education.

26. The economy has witnessed a fairly rapid rate of growth during the Second Plan period. The investment rates have gone up dramatically, both because of the larger inflow of foreign assistance and the increased domestic savings. The economy is already undergoing a significant structural change which is evident in the rising contribution of industry to GNP, employment and exports. The pace of development in East Pakistan has been accelerated. There is no doubt that, by the end of the Second Plan, the economy will be poised for a more ambitious development effort.

CHAPTER 2

LONG-TERM PERSPECTIVE

The Third Plan is the first to be formulated explicitly within the framework of a Perspective Plan. It was inevitable that in the earlier years of our development, the plans should have been restricted to comparatively short periods of five years. But with the acquired experience and knowledge and with broadened concepts, it is now possible to make projections into the future for as long a period as almost a generation. This long-term plan, *viz.*, the Perspective Plan, is being prepared for 20 years. The period is necessarily arbitrary and there is no sacrosanct or profound reason for its determination but it seems to be, on the one hand, long enough to permit a meaningful structural change in the economy and, on the other, not so long as to be without personal interest to the present working generation.

2. The explicit aims of the Perspective Plan are :

(a) a tripling of the Gross National Product from about Rs. 44,000 million in 1965 to about Rs. 145,000 million in 1985 ;

(b) provision of full employment to the entire labour force ;

(c) parity in *per capita* incomes between East and West Pakistan ;

(d) universal literacy ;

(e) elimination of dependence on foreign assistance.

From time to time, there will be revaluations of the priorities attaching to various objectives of the Perspective Plan : preferences may alter as social changes are brought about over time. Even when the long-term objectives remain unchanged, it may become necessary to change some of the basic assumptions of the long-term model as more experience is accumulated in the process of growth. Moreover, since all future projections are uncertain and conditions can change rather rapidly, it is clear that a Perspective Plan can never be a document which keeps its value for longer than five years at best. It will be necessary, therefore, to present a revised Perspective Plan with each Five-Year Plan.

3. It should also be understood that the various objectives mentioned above are not necessarily consistent with each other. The objective of tripling national income in twenty years, for example, implies a fairly liberal application of modern technology, which tends to be very capital-intensive. This may conflict with the goal of full employment. Again, in order to equalise *per capita* incomes in the two Provinces, it may be necessary to curb West Pakistan's rate of growth, thus possibly reducing the overall growth rate and thereby making it more difficult to achieve the tripling of national income. The simultaneous pursuit of these diverse goals is made more difficult by the constraints that are imposed by

the scarcity of resources. The reconciliation of these objectives constitutes a considerable challenge to the planners.

4. This chapter summarizes the overall targets and strategies for the Perspective Plan. A detailed analysis of the problems of long-run growth, together with a description of the assumptions made, procedures used, results obtained and policies recommended will be released as a separate document.

I. GROSS NATIONAL PRODUCT

5. The long-term growth model involves raising the level of the GNP to over 3 times its present level, *i.e.* from about Rs. 44,000 million in 1965 to Rs. 145,000 in 1985 in constant 1965 prices. The rate of growth will have to rise from an average of 4.8 per cent per annum during the Second Plan to 7.0 per cent during the Sixth, giving an average annual rate of growth of 6.2 per cent for the Perspective Plan. If this growth rate is attained, the current *per capita* income will be more than doubled by 1985. An average family of five can look forward to a monthly income of about Rs. 325 which, even after taxation and savings, will at least ensure the basic amenities of life. The basic framework of the Perspective Plan is summarised in Table I below.

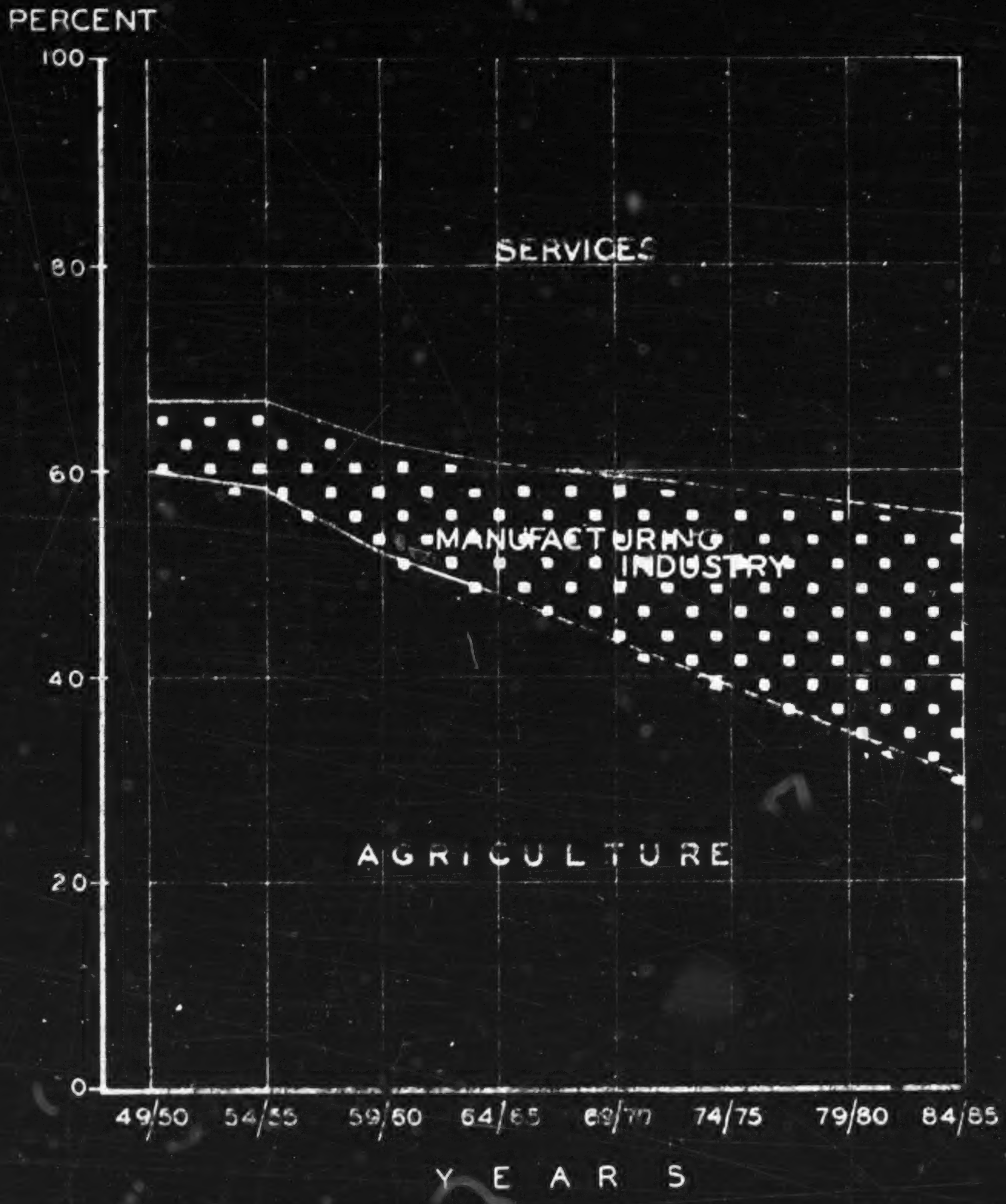
TABLE 1

Basic Framework of the Perspective Plan

(Million Rs. ; 1964-65 prices)

	Third Plan (1965-70)	Fourth Plan (1970-75)	Fifth Plan (1975-80)	Sixth Plan (1980-85)
Key Magnitudes				
(Annual averages)				
Gross national product	51,700	68,000	92,100	127,800
Rate of growth (%)	5·4	6·0	6·5	7·0
Population	122	140	160	180
Per capita income (Rs.)	424	486	575	710
As a percentage of GNP				
(at the end of the Plan period)				
Gross investment	18·6	19·9	22·2	23·9
Gross domestic savings	12·6	16·2	20·0	22·8
Foreign assistance	6·0	3·7	2·2	1·1
Assumptions				
Population growth rate (%)	2·6	2·7	2·6	2·2
Capital-output ratio (gross)	3·5	3·5	3·6	3·7
Marginal rate of savings (%)	23	26	30	31

COMPONENTS OF THE GROSS NATIONAL PRODUCTS (IN 1964/65-PRICES), 1949/50-1984/85



6. The process of rapid growth will bring about considerable changes in the sectoral composition of the GNP. Sectors such as mining, manufacturing, construction and transport, which offer greater possibilities of quickly increasing their output, are planned as the leading sectors which will grow faster than the GNP and thus increase their shares in the composition of the national product (*see* Table 2).

TABLE 2

Changing Structure of GNP, 1965—85

(Million Rs. ; 1964-65 prices)

Sector	1965	1970	1985	Annual growth rate 1965-85 (per cent)
1. Agriculture	20,900	24,150	44,950	3·9
2. Mining	130	190	730	9·0
3. Manufacturing	5,620	8,950	31,860	9·1
(*a*) Consumer goods :	(3,920)	(5,870)	(16,320)	7·4
(*b*) Intermediate products ..	(1,400)	(2,430)	(10,540)	10·6
(*c*) Investment goods	(300)	(650)	(5,000)	15·1
4. Public utilities..	190	260	1,000	8·7
5. Construction	1,950	2,690	8,400	7·6
6. Transport and communications	2,710	3,930	12,760	8·0
7. Other services	12,500	16,830	45,300	6·6
	44,000	57,000	145,000	6·2

On the other hand, agriculture is expected to grow more slowly and its share is likely to decline. The services sector is projected to grow in line with the national income and remain a more or less constant proportion of the GNP over the period. The structural changes implicit in these projections are brought out in Table 3.

TABLE 3

Sectoral Composition of the GNP, 1965—85

(Percentages)

Sector	1965	1970	1985
Agriculture	47·5	42·4	31·0
Mining, manufacturing and public utilities ..	13·4	16·5	23·2
Construction	4·4	4·7	5·8
Transport and communications	6·2	6·9	8·8
Other services	28·5	29·5	31·2
Total ..	100·0 1	00·0	100·0

II. INVESTMENT

7. Implicit in the higher growth rates of the Perspective Plan is a substantial increase in the level of investment. The Plan projections indicate that investment will rise from about 16 per cent of the GNP in 1965 to almost 24 per cent in 1985. Over the twenty-year period, it is to be expected that the composition of investment will alter and that projects with long gestation periods and high-capital-output ratios will become relatively more important. The growth rates of the GNP have been estimated after assuming both a considerable time-lag between investment expenditures and consequent changes in output and a decline in the productivity of new investments over the next twenty years.

III. DOMESTIC SAVINGS

8. To an increasing extent, this investment will have to be financed out of the country's own savings. In 1965, gross domestic savings will amount to about 9.5 per cent of the GNP and finance only about 60 per cent of the total investment in that year. Since one of the chief objectives of the Perspective Plan is to eliminate the dependence on external assistance, the proportion of investment financed by foreign funds is projected to decline progressively, until in 1985 virtually the entire capital formation will be accounted for by domestic resources. The rate of domestic savings will, therefore, have to increase fairly steeply to about 23 per cent of the GNP by the end of the Perspective Plan. These details are brought out in the following table.

TABLE 4

GNP, Investment, Savings and External Resources

(Million Rs. ; 1964-65 prices)

	1965	1970	1975	1980	1985	Annual compound rate (%) 1965-85
G.N.P.	44,000	57,000	76,000	104,500	145,000	6·2
Plan investment	6,950	10,600	15,000	23,000	34,700	8·5
Domestic savings	4,200	7,200	12,100	20,500	33,100	11·0
External resources	2,750	3,400	2,900	2,500	1,600	—2·7
As a % of GNP						
Plan investment	15·8	18·6	19·9	22·2	23·9	
Domestic savings	9·5	12·6	16·2	20·0	22·8	
External resources	6·3	6·0	3·7	2·2	1·1	

9. The marginal rates of savings implicit in these projections appear to rise sharply, from roughly 20 per cent during the Second Plan to over 30 per cent during the Sixth. In judging these rates, however, it should be borne in mind that in the later Plan periods *per capita* incomes will be

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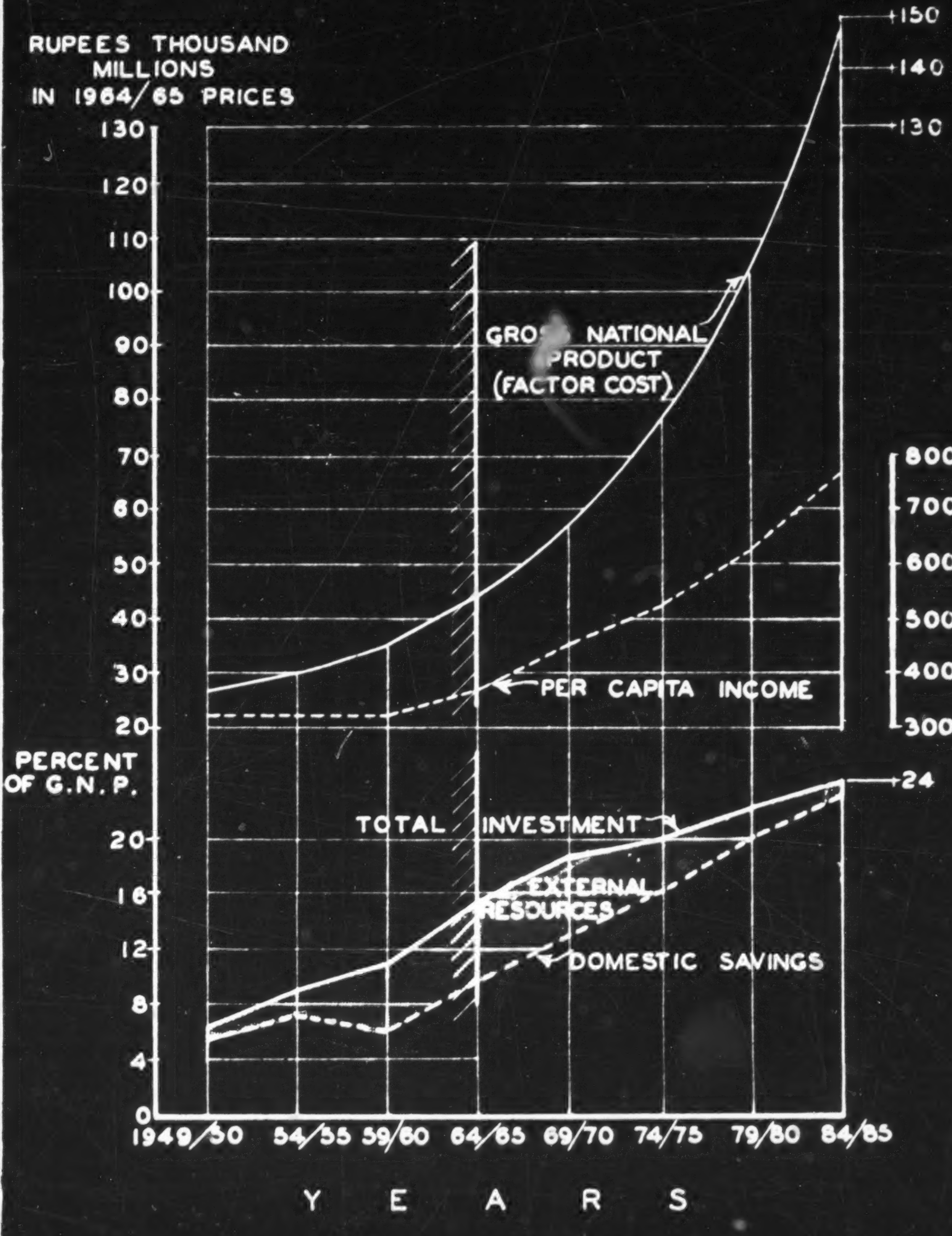


rising much faster than in the earlier years, leading to additional savings. This becomes clear if we compare the marginal rates of saving from total and from *per capita* incomes (which is a better index of the sacrifice that each individual has to make) in each Plan period (*see* Table 5). The rise in the marginal savings rate from *per capita* incomes is much less steep than in the rate from total incomes, indicating that the burden, though heavy, does not increase as rapidly as the rates from total income would seem to suggest.

TABLE 5

Marginal Rates of Savings

(Percentages)

Plan period			From Total Income	From *per capita* Income
Second Plan	(1960—65)	..	21	36
Third Plan	(1965—70)	..	23	36
Fourth Plan	(1970—75)	..	26	38
Fifth Plan	(1975—80)	..	30	38
Sixth Plan	(1980—85)	..	31	35

10. This becomes even more clear if the increase in *per capita* consumption in successive Plan periods is taken into account. Over the whole of the Perspective Plan, the level of *per capita* consumption will grow by about 70 per cent of the base-year figure. In each Plan period, however, the increase in *per capita* consumption will be considerably larger than the additional savings and not less than the increase in consumption during the previous Plan. More hopeful still is the acceleration implied by these figures. In the Third Plan, *per capita* consumption will increase by barely 10 per cent (which is still more than the improvement in the Second Plan), but in the Sixth Plan the cumulative effect of two decades of development will result in a rise of *per capita* consumption by nearly 20 per cent in five years. Once the basis for further growth is laid, rapid improvement in the standard of living can be expected. These trends are brought out in Table 6.

TABLE 6

Increase in Per Capita *Incomes, Consumption and Savings*

(Rupees ; 1964-65 prices)

	1960—65	1965—70	1970—75	1975—80	1980—85
Per capita income ..	38	53	72	108	158
Per capita consumption ..	23	34	45	68	102
Per capita savings ..	15	19	27	40	56

IV. BALANCE OF PAYMENTS

11. The development programme sketched out above has consequences for the country's external economic relations. The most important aspect of this is related to the Plan's objective of eliminating dependence on foreign assistance by 1985. The inflow of foreign resources serves two important purposes at the present stage of Pakistan's development; it augments the supply of domestic savings and it adds to the pool of foreign exchange that is urgently needed for the increasing import requirements of a growing economy. To do away with the need for foreign assistance, therefore, we must adopt a strategy to deal with each of these aspects. The savings aspect has already been touched upon ; the foreign exchange aspect is discussed below.

12. The strategy embodied in the balance of payments projections rests very heavily on two main considerations. Firstly, a vigorous policy to increase export earnings must be pursued. The targets projected imply that export will have to grow at an annual rate of about 7 per cent—a little faster than the growth rate of national income—so that in 1985 the ratio of export to GNP will be of the order of 8 per cent as against about 7 per cent in 1965. These targets are undoubtedly ambitious and their realisation will make very considerable demands on the nation's efficiency and ingenuity. However, since exports will continue to be a small proportion of the GNP, it should be possible to find markets for the country's growing exportable surpluses, particularly in manufactures.

13. The second element in this strategy is a policy of massive import substitution, especially of capital goods. Domestic manufacture of machinery and equipment is estimated to rise sharply from Rs. 500 million in 1965 to Rs. 8,000 million in 1985, while imports of this type of goods will increase much more slowly, from Rs. 2,630 million to Rs. 4,000 million. Imports of non-development goods will be kept down firmly ; in fact, the imports of finished consumer goods are projected to remain at their Second Plan level, while raw materials for consumer goods are expected to rise by only 30 per cent per Plan period. The major increase will be in the imports of raw materials for investment goods, from Rs. 1,000 million in 1965 to Rs. 3,300 million in 1985, indicating the magnitude of the proposed import substitution in capital goods as well as intermediate products. The absolute inflow of foreign resources is projected to increase until the Fourth Plan period (to enable the early setting-up of import-substituting industries) ; thereafter, it is phased down rapidly over the next two Plan periods. The proportion of foreign financing declines steadily, of course, over the entire period, as brought out in Table 4 above.

14. The balance of payments is shown in more detail in the following table :—

TABLE 7

Balance of Payments Projections, 1965—85

(Million Rs. ; 1964-65 prices)

	1965	1985	Annual compound rate of growth (1965-85)
1. Development imports	3,630	7,300	3·6
Capital goods	(2,630)	(4,000)	2·2
Raw materials for capital goods	(1,000)	(3,300)	6·1
2. Non-development imports .. .. .. (including debt-servicing)	2,070	5,600	5·1
3. Total imports	5,700	12,900	4·2
4. Total export earnings	2,950	11,300	6·0
5. Total external resources	2,750	1,600	—2·7

Note.—Excludes PL 480 imports and imports for Indus Basin replacement works.

V. REGIONAL DEVELOPMENT

15. One of the primary objectives of the Perspective Plan is to eliminate the current disparity in the *per capita* income of East and West Pakistan. In order to achieve this objective, the time-path of the rate of growth has to be defined carefully for the two regions so that East Pakistan is enabled to catch up with West Pakistan in its *per capita* income while at the same time the Perspective Plan period does not end with such growth rates as create disparities in the reverse direction. The strategy for investment, saving and balance of payments must also be worked out separately for the two regions in order to ensure that the proposed growth rates are actually achieved. The long-term growth model developed in this chapter is in overall national terms. Extensive work is proceeding at present to give a regional dimension to all the magnitudes. The finalisation of this work will, however, have to await the final Report of the National Income Commission.

VI. POPULATION

16. The improvement in living standards, as reflected in the earlier projections of *per capita* incomes, rests very heavily on certain assumptions regarding the growth of population. These assumptions are briefly considered in the following paragraph.

17. It is estimated that the size of population will be 113 million in 1965 and that it will be growing at an annual compound rate of about 2.6 per cent during the Perspective Plan. With the planned improvement in health facilities and nutritional standards, the mortality rate must be expected to decline fairly rapidly over the Perspective Plan period. Unless it is checked by a fall in the fertility rate, the population growth rate could easily be pushed up to 3 per cent per annum. If this happens, population would double itself by 1985. Such an increase would defeat any attempts to raise *per capita* incomes by a significant amount. One of the basic assumption of the present projections, therefore, is that the rate of growth of population will decline after 1975 owing to a decrease in the fertility rate. In other words, it is assumed that declining fertility will more than compensate for declining mortality. The population in 1985 is then projected at 186 million. A vigorous and broadly-based programme of family planning is thus an integral part of the strategy for the Prespective Plan.

VII. FULL EMPLOYMENT

18. The chief objective of the full employment policy is to secure a wider participation in the fruits of economic progress. The projected growth of the labour force and employment over the Perspective Plan period is summarized in Table 8 below.

TABLE 8

Labour Force and Employment, 1965—85

(million man-years)

	1965	1970	1975	1980	1985
Labour force	37·2	41·4	46·4	52·8	59·7
Employment	29·2	33·7	39·9	47·6	56·5
Unemployment	8·0	7·7	6·5	5·2	3·1
Unemployment as a % of labour force	21·5	18·5	14·1	9·8	5·4

19. Under-employment is fairly widespread in rural areas at present. The labour force is estimated at about 37 million workers in 1965, of whom over 20 per cent would be idle if the rest were to be fully employed. The total number of persons affected is even larger, as unemployment occurs mainly in the form of an under-utilization of the available manpower. The rapid growth of population and changes in the age-structure will quickly push up the size of the labour force to almost 60 million by 1985, even if one makes fairly conservative assumptions regarding labour-participation rates. If by 1985 only about 5 per cent of the

available manpower is left unutilized—which would be a reasonable minimum—then jobs will have to be created for over 27 million persons over the Perspective Plan. In the Sixth Plan alone the increase in the labour force will be about 7 million, which is equal to the entire industrial labour force of France or Germany today. There is no doubt that the problem of full employment will be one of the biggest obstacles to the success of the Perspective Plan. The magnitudes concerned are formidable, and the picture shows wide differences between East and West Pakistan. Nevertheless, precisely because of the numbers involved—*i.e.* that it brings so many persons into the orbit of economic growth and enables them to share in its benefits—a policy of full employment must be given top priority in the next two decades.

20. Such a policy calls for a careful analysis of the potential of each sector for absorbing more workers. The composition of the development programme, therefore, must be geared to the employment target by making the employment effect of each project a factor in judging its acceptability. It also provides a criterion for analysing the comparative advantages of different techniques of production.

21. The second element in the strategy will be to link employment policy closely with policies relating to education. The pattern of industrialisation that is envisaged indicates that the demand for labour will, in the years to come, be increasingly concentrated on skilled workers, technicians and high-level specialists. Agriculture, too, will require a better-trained and more scientifically-minded worker. The targets of the Perspective Plan in the social sectors, such as the provision of universal primary and secondary education, or of adequate health facilities, will also exert their pressures for the supply of highly-trained personnel. There is already a gap between present requirements and availabilities, and future demands will greatly add to the calls made on the capacity of the education sector to produce the numbers and quality of labour needed for expanded production activities.

22. Thirdly, the strategy will be to concentrate efforts on those regions where unemployment is worst. It focuses attention on the need to accelerate the programme especially in East Pakistan, where unemployment is most widespread (nearly two-thirds of current total unemployment occurs in that area) and in the more under-developed areas of West Pakistan. This policy will be closely connected with the Perspective Plan's objective of removing income disparities between the two Provinces. The regional programmes will have to be carefully balanced in order to influence labour productivity in such a way that income-parity and full employment become fully interwoven and mutually consistent targets.

23. Finally, the biggest constraint imposed upon planning for full employment is set by the availability of resources. This will become more serious over the Perspective Plan period because industrial policy

will be strongly biased in favour of heavy industry complexes (for balance of payments reasons), whose direct impact on employment is very small. Even at the present time, the cost of employing an additional worker in industry comes to almost Rs. 20,000. An important element in the employment strategy, therefore, will be to devise policies that will distribute the labour force over these sectors in which the cost of employment is small, such as in rural works (where the cost of employing an additional worker is only about Rs. 600) or in small-scale industries. A tentative estimate of employment by sectors is shown in Table 9 below. By 1985, it is expected that agriculture will employ only 44 per cent of the labour force as against 62 per cent in 1965 while manufacturing industry will be providing jobs to about 8 million workers compared to 3 million in 1965.

TABLE 9

Structure of Employment, 1965—85

(million man-years)

	1965	1970	1985	Annual growth rate 1965-85 (per cent)
1. Agriculture	18·00	19·30	26·30	1·9
2. Mining	·02	·02	·05	4·7
3. Manufacturing :	3·20	4·15	8·05	4·7
(*a*) Consumer goods	2·50	3·20	6·00	4·5
(*b*) Intermediate products ..	·50	·67	1·32	5·0
(*c*) Investment goods	·20	·28	.73	6·7
4. Public utilities	·02	·03	·05	4·7
5. Construction	1·80	2·30	4·85	5·1
6. Transport and communications ..	1·10	1·45	3·50	6·0
7. Other services	5·06	6·45	13·70	5·1
Total employment ..	29·20	33·70	56·50	3·4

VIII. EDUCATION

24. The educational targets of the Perspective Plan reflect not only the view that increased education is a benefit to the entire society, but are also chosen for their economic impact. As the Second Plan trenchantly put it : " No illiterate country has ever achieved significant economic development, and an educated community with highly trained leadership does not remain economically backward ".

25. The relevant age-groups (6-11 for the primary and 11-14 for the lower secondary stage) show an increase of 10 million and 6 million respectively during 1965-85 according to the population projections by age-groups. At the end of the Second Plan, enrolment will be about 8 million out of a total number of children of school-going age of around 25 million. Universal eight-year education by 1985 means, therefore, that additional facilities for 33 million children have to be provided over the period of the Perspective Plan, *i.e.* a four-fold increase over the present level.

26. More children actually register in schools than the above figures suggest. In East Pakistan, it is estimated that as many as 50 to 60 per cent of all pupils in Class I drop out before the end of the year. For instance, only 18 per cent of the 1958-class I generation reached class V in 1962. In West Pakistan the situation is almost as bad. There are many reasons for the high rate of drop out : transportation difficulties, labour shortage at the time of harvest, sickness and malnutrition, absenteeism among teachers and the child's unhappy experience in Class I, because of the crowdedness of inadequate buildings and the low standards of teaching.

27. Thus, not only must the numbers of buildings and teachers be increased, but teacher-pupil ratios must be lowered and the general quality of teaching raised. There are other factors, too, which make it particularly difficult to achieve universal education. The most important of these is a wide-spread lack of interest in the education of girls. This is somewhat less in East Pakistan, where by 1965 about 23 per cent of all girls in age-group 6-11 are expected to be enrolled, than in West Pakistan where the percentage is only 14.

28. On these grounds, it would be too optimistic to expect the achievement of the educational targets given by the National Education Commission for reaching universal primary education by 1970 and eight years of elementary education for all by 1975. With regard to primary education, it will be possible to reach full enrolment of boys, but it would not be realistic to assume complete female enrolment before 1980. As for the targets relating to the lower secondary classes, it appears possible to reach universal enrolment for boys by 1980, but it is doubtful whether female enrolment can be brought to that level in the last five years of the Perspective Plan.

29. One of the main bottlenecks will be the availability of teacher-training facilities. Absorbing the projected number of pupils will put severe strains on the reservoir of teaching staff and on the institutes that provide additions to this staff. The total number of teachers to be trained during the Perspective Plan period is estimated at about 1.5 million, or 75,000 per annum. This compares with a present teacher-training capacity of around 20,000 per annum.

30. In conclusion, it must be reaffirmed that the estimates given in this chapter are extremely tentative. Detailed work is currently proceeding on these estimates and the strategy of the Perspective Plan will be given a more concrete shape in the light of this work.

CHAPTER 3

STRATEGY OF THE THIRD PLAN

The strategy of the Third Plan flows inevitably from the lessons learnt from planned development in the last 15 years and the targets set for the next 20 years under the Perspective Plan. As discussed in Chapter 1, the last 15 years have witnessed a rapid rate of economic development and building up of infra-structure but there are certain imbalances, especially in agriculture, education and social services, which have to be removed. The framework of the Perspective Plan, which is discussed in Chapter 2, defines the general direction in which the economy is expected to move in the next two decades. Thus, the basic rationale of the Third Plan has to be formulated both in relation to past experience and future tragets.

I. GROWTH RATE STRATEGY

2. The Third Plan aims at a 30 per cent increase in the GNP or an annual compound rate of 5.4 per cent. The choice of a target of growth rate for the Third Plan must be based not only on a careful evaluation of the recent experience but also on the long-run objectives of the Perspective Plan. Tentatively, it is estimated that an average annual compound growth rate of 4.8 per cent will be experienced during the Second Plan period and the trend growth rate in the last year of the Second Plan will be about 5 per cent. The target of the Perspective Plan is an annual compound growth rate of 6.2 per cent. The Third Plan should mark a transition from past achievements to future ambitions. In fact, the high growth rates achieved recently point to the possibility of raising the growth target both for the Third Plan and the Perspective Plan. This is a possibility which will be carefully examined before these Plans are finalized.

3. Industry is likely to continue to be the leading sector during the Third Plan period. The Plan projects an annual growth rate of about 10 per cent in the industrial sector, about 3 per cent in the agricultural sector, and about 6 per cent in services. Again, this is in line with past experience and future objectives. During the Second Plan period, the rate of growth of industry was about 8 per cent per annum as against 3 per cent in agriculture. The Perspective Plan postulates growth rates of about 4 per cent and 9 per cent respectively for agriculture and industry. However, it will take time to overcome the organisational bottlenecks in agriculture while the possibilities of obtaining high growth rates in industry during the Third Plan continue to be good because the industrial base is still not very large. Of the planned increase in national income during the Third Plan period, as much as 75 per cent is expected to be contributed by the non-agricultural sectors. Thus, the structural changes discussed in Chapter 1 are likely to continue during the course of the Third Plan period.

II. INVESTMENT STRATEGY

4. The investment effort required during the Third Plan has been determined partly on the basis of the experience regarding the over-all capital-output ratio in the implementation of the Second Plan and partly by evaluating the costs of detailed projects and programmes in various sectors. The implicit capital-output ratio in the Third Plan comes to 3.5. Whether or not this is a reasonable estimate can be established only when the detailed projects and programmes have been formulated for the Third Plan and detailed physical targets spelt out in each sector. According to a preliminary evaluation of the Second Plan, gross capital-output ratio is likely to be 2.8. It is almost inevitable that capital-output ratio would rise in the course of the Third Plan since the emphasis of the Plan is going to be on heavy industry and on creating infra-structure in East Pakistan in order to accelerate the growth of that region. Moreover, welfare programmes in the fields of education, health and social services are likely to claim a higher allocation in the Third Plan though the physical returns from these programmes may not be very high in the short run. Such a rising trend in the capital-output ratio would be moderated to some extent by the external economies generated by the infra-structure already built in the first two Plans and by the continuous improvement in the efficiency of public and private sectors, but it is unlikely that these developments will completely neutralise the expected rise. However, the jump from 2.8 to 3.5 does appear to be too sharp which opens up the possibility of attaining a higher rate of growth than 5.4 per cent with the investment postulated in the Third Plan. This is an aspect which is receiving considerable attention at present.

5. The Third Plan envisages an increase of about 53 per cent in investment over the five year period. This implies an annual compound rate of increase of about 9 per cent. This rate of increase is lower, in fact, than what has already been achieved during the last 15 years. However, it will require continued improvement in the implementation capacity of public and private sectors because the base from which the Third Plan starts is much higher than the previous Plans. Also, the planned rate of increase in investment is much sharper in East Pakistan (about 14 per cent per annum) where a good deal of improvement in absorptive capacity is required for the successful implementation of the proposed investment rates.

6. The share of public and private sectors in total investment continues to be about the same as in the Second Plan. However, the role assigned to these sectors is different in the two regions. The public sector will have to play a much larger role in East Pakistan where substantial infra-structure has yet to be built and private sector is still quite shy. For this reason, the share of public sector in the total investment is about 63 per cent in East Pakistan compared with 57 per cent in West Pakistan. The different emphasis on the role of the public sector in the two regions

is particularly evident in the field of industry where about half of the investment will be managed by the East Pakistan Industrial Development Corporation as against only about one-fourth by its West Pakistani counterpart. Even in the case of West Pakistan, it appears that the role of the public sector is not likely to decline much despite the considerable infra-structure already built during the previous Plans because the second phase of industrialisation concentrates mainly on basic and heavy industries which will imply a larger role for the public sector than would have been the case otherwise.

III. SAVING STRATEGY

7. The Third Plan must maintain a very high marginal rate of saving so as to improve the average saving rate of the economy and to progressively reduce Pakistan's dependence on foreign assistance. It is estimated that during the Second Plan the country would save about 20 per cent of the additional income generated during this period. As a result, the average saving rate would increase from about 6 per cent in 1959-60 to about 9.5 per cent in 1964-65. The Third Plan postulates a target of 23 per cent for the marginal rate of saving. This is a fairly ambitious target even though it is encouraging to note that the Second Plan record is quite good in this respect.

8. There are three main elements in the strategy of mobilisation of domestic savings. Firstly, it is quite clear that the saving sectors in the economy will have to be encouraged. The past experience shows that the large-scale industrial sector, which saved and re-invested nearly 75 per cent of its profits, was growing at a fairly rapid rate of over 12 per cent per annum and, as such, was making a handsome contribution to the additional saving effort of the country. This means that so long as large-scale manufacturing is the leading sector in the economy, there will automatically be a higher marginal saving rate compared with the average. The Third Plan postulates a rate of growth of about 12 per cent in large-scale manufacturing. Furthermore, the emphasis on heavy industry within the industrial sector would also be helpful for the saving effort. The past experience, particularly during the First Plan period, shows that it is fairly difficult to obtain a high rate of saving from the economy by concentrating on the production of consumer goods and by hoping to export the products of these industries to finance capital goods imports. The limitation is imposed both by the demand in the international market for our industrial exports and by the domestic pressures for higher consumption levels which emerge when the capacity for consumer goods industries is expanded. It is a better strategy to limit the expansion of the capacity in the consumer goods sector in the very first instance and to deny the economy the temptation of an unplanned increase in its consumption.

9. Secondly, a high marginal rate of saving is also implicit in the targets set for additional exports and imports. The import system has

been geared in favour of development imports so that about 62 per cent of the additional imports during the Third Plan period will consist of capital goods and raw materials for capital goods. This means that the additional exports of Rs. 5,000 million proposed for the Third Plan will be mainly transferred into investment through the balance of payments mechanism.

10. Finally, an effort will be made during the Third Plan period to raise the proportion of GNP withdrawn by the public sector in the form of taxes and other receipts so that the size of public savings might be increased further. Additional taxation of Rs. 3,000 million has been proposed towards this end. As discussed in Chapter 5, the Government will be capturing in the form of taxes about 11 per cent of the GNP by the end of the Third Plan compared with 9 per cent in 1965. Such a fiscal reorientation is an essential part of the domestic saving strategy of the Third Plan.

IV. BALANCE OF PAYMENTS STRATEGY

11. The main aim of the balance of payments strategy in the Third Plan is to prepare the economy for a gradual reduction in the need for foreign assistance and to move towards greater economic viability. There are three main elements in this strategy. Firstly, it is proposed that exports should be increased at a rate faster than the GNP. Thus, the planned rate of increase in exports is 7.5 per cent per annum compared with the target of 5.4 per cent increase in the GNP. The increase in exports is expected mainly in manufactured goods and in non-traditional items like rice and fish. This means that particular emphasis will have to be placed on the efficiency of the industrial sector from which increased output and increased exportable surpluses in manufactures are to be obtained. Also, the scale at which industries are established in future will have to be geared more closely to the possibilities of capturing export markets rather than based entirely on the limited domestic market.

12. Secondly, the import substitution effort will have to be intensified, particularly in the field of capital goods and in the supply of finished materials like iron and steel products, fertilizers etc. As discussed in Chapter 2, the domestic output of capital goods will have to be increased about 16 times in the next 20 years in order to meet the requirements of the investment levels planned for the future. The Third Plan will make a decisive move in this direction.

13. Finally, it would be necessary to economise on the use of foreign exchange by developing an appropriate technology adapted to the resource endowment of the country. The scarcity price of foreign exchange should be appropriately reflected to the economy so that there is an incentive to use less foreign exchange and more domestic resources.

It is also intended to intensify investments in the exploration and exploitation of fuels and minerals in order to replace some of the current imports by indigenous raw materials and substitutes.

V. REGIONAL STRATEGY

14. The disparity in regional *per capita* incomes has to be removed over the Perspective Plan period, *i.e.,* by 1985. The Third Plan proposes to reduce the current disparity by about one-fifth. Accordingly, the Third Plan outline proposes an increase of 34 per cent in the regional income of East Pakistan and 27 per cent for West Pakistan. This implies that the rate of growth in East Pakistan would have to be accelerated while that of West Pakistan would be maintained at about its current level. As noted earlier, the increase in the rate of investment in East Pakistan would have to be much sharper than West Pakistan in order to achieve these objectives. Also, a net transfer of resources to East Pakistan would be required to finance the proposed investment target. It is with this in view that a major part of the additional exports would be obtained from West Pakistan during the Third Plan period so that the current deficit in the balance of payments of West Pakistan can be reduced and the way paved for a transfer of resources to East Pakistan. The various elements of the regional strategy are discussed at greater length in Chapter 7.

VI. EMPLOYMENT STRATEGY

15. The increase in employment opportunities in the past has not kept pace with the increase in labour force. If the situation is to be reversed during the Third Plan period, much more emphasis will have to be given to labour-intensive programmes and to building up a competent organisation for the proper use of the abundant manpower resources of the country. One element in this strategy would be the spread of technical training facilities at a rapid rate so that labour force is properly equipped for the kinds of jobs which will be created during the Third Plan period. The tempo of the rural works programme will also be stepped up since it takes much smaller capital expenditure to extend employment opportunities through this programme. Moreover, the additional jobs are created in the rural areas where the problem of under-employment is acute. An allocation of Rs. 2,500 million for the rural works programme is being made in the Third Plan as against an estimated actual expenditure of Rs. 800 million during the Second Plan. It is expected that by the last year of the Third Plan there will be about 4.5 million additional jobs, of which nearly one million will be in the manufacturing sector, 1.3 million on the newly irrigated and improved agricultural lands, about 400 thousand through the rural works programme and another 1.8 million in other services and ancillary industries.

VII. ALLOCATION STRATEGY

16. The pattern of allocation of investment funds follows inevitably from the various elements of development strategy discussed above. If the rate of growth is to be accelerated to 5.4 per cent per annum, if a high marginal rate of saving is to be obtained, if manufactured exports are to be encouraged, if import substitutes are to be found for capital goods, and if population is to be taken off the already over-populated land where the average farm holding is merely 3 acres per person, it is almost inevitable that the industrial sector should be given priority in the allocation of investment, its past rate of growth should be maintained, and considerable emphasis placed on the development of heavy industry within the industrial sector. This is basically the choice being made in the Third Plan. Of the total allocation, as much as 27 per cent is earmarked for industry and nearly two-thirds of this will be spent on capital goods industries. Of course, the growth potential in the agricultural sector will also be exploited at as rapid a rate as possible but many stubborn problems need to be tackled. The future cropping pattern has to be evolved carefully after fully examining the possible role and composition of the PL 480 programme.

17. The various elements of strategy discussed above are not necessarily compatible. It always takes great skill to reconcile the inevitable conflicts in policy objectives. The strategy outlined above brings out some of the problems which have to be tackled in order to harmonise various elements of policy within the framework of the Third Plan.

CHAPTER 4

OBJECTIVES, SIZE AND STRUCTURE

I. PLAN OBJECTIVES

The objective of the Third Plan have been formulated within the framework of the 20-year Perspective Plan (1965—85) and in the light of the achievements and shortfalls of the previous two Plans. The principal objectives set for the Third Plan are as follows :—

(i) To attain a rapid growth of the national economy with a view to ensuring a break-through to self-sustained growth in the shortest possible time. It is proposed to aim at a minimum increase of 30 per cent in national income over the five year period from 1964-65 to 1969-70.

(ii) To reduce the degree of inter-regional and intra-regional disparity. It is proposed to reduce the existing level of disparity in income per head between East and West Pakistan by about one-fifth.

(iii) To provide at least 4.5 million new job opportunities with a view to preventing any aggravation of the existing un-employment situation.

(iv) To strengthen the balance of payments of the country by increasing the country's foreign exchange earnings at a rate faster than G.N.P. and by driving ahead with import substitution. It is expected that the country's earnings of foreign exchange will reach a level of Rs. 4,250 million by 1970 compared with about Rs. 2,950 million at the end of the Second Plan.

(v) To develop basic industries for the manufacture of producer goods so that the requirements of further industrialisation can be met mainly from the country's own capacity.

(vi) To secure the transformation of agriculture, by increasing productivity and expanding purchasing power in rural areas through a massive Works Programme.

(vii) To arrest the menacing growth of population by taking decisive steps towards population control.

(viii) To provide better housing, more health services, and greater facilities for education, especially for the lower income groups.

(ix) To make substantial progress towards achieving certain specific social objectives such as diminishing inequalities in the distribution of income, wealth and economic power, providing a measure of social security and promoting social and cultural change conducive to accelerated economic expansion.

2. These objectives, only some of which can be precisely defined in quantitative terms, are not necessarily compatible. Ideally, if more than one objective is set, it is necessary also to lay down the limits which each imposes on the other so that clear and precise criteria for investment decisions can be established in the light of a single preference function. It is doubtful if this theoretical ideal is realized in any country. Conflicts of objectives are inevitable in any plan which runs the entire gamut of the social and economic life of a country ; their reconciliation is always a delicate and difficult task for the policy makers.

II. SIZE OF THE PLAN

3. A gross development programme of Rs. 52,000 million is proposed for the Third Five-Year Plan. A Plan of this magnitude is necessary to maintain the rising tempo of development which has already been built in the economy and to attain the main objectives of the Plan. It is also in harmony with the country's long range strategy of accelerating the growth rate without any undue strain on consumption. The suggested development expenditure is expected to lead to an annual rate of growth of 5.4 per cent compared with 4.8 per cent during the Second Plan period and the target of an average rate of 6.2 per cent for the Perspective Plan. In determining the size of the Plan, due consideration has been given to the expected availability of financial resources and the capacity of the country for effective implementation.

4. The proposed development programme of Rs. 52,000 million represents the gross Plan size. The preliminary estimates of resources indicate a financially feasible programme of Rs. 45,500 million. However, the resource projections are being reviewed at present. The concept of a gross Plan size is mainly designed to provide a certain degree of flexibility in programming and façilitate the preparation of a larger portfolio of projects, particularly for negotiating foreign assistance. It is also difficult to make projections of resources with any certainty so far in advance.

III. SECTORAL ALLOCATIONS

5. The sectoral breakown of the gross plan of Rs. 52,000 million is shown in the following table. The estimated actual expenditure in each sector during the Second Plan period is also indicated in the table to bring out the rate of acceleration in different sectors.

TABLE 1

Sectoral Allocations in the Third Plan

(Million Rs.)

Field of Development	Proposed Allocation for the Third Plan			Second Plan Estimated Actual	Percentage Increase of (4) over (5)
	Government sector	Private sector	Total		
1	2	3	4	5	6
1. Agriculture	4,340	2,000	6,340	2,940	116
2. Water and power ..	8,630	300	8,930	4,640	93
3. Industry	4,750	8,300	13,050	5,800	125
4. Fuels and minerals ..	900	750	1,650	860	92
5. Transport and communications.	5,870	3,100	8,970	4,440	102
6. Physical planning and housing.	2,740	3,150	5,890	3,850	53
7. Education	2,740	300	3,040	1,080	181
8. Health ..	1,180	40	1,220	510	133
9. Manpower .. }	350	60	410	80	412
10. Social welfare }					
11. Works programme ..	2,500	..	2,500	800	213
Total	34,000	18,000	52,000	25,000	108

6. In determining the allocations for different sectors, such factors as likely contribution of the sector to the attainment of the Plan objectives, past performance and potential for future growth, likely impact on savings and investments, and internal consistency of the programmes have been taken into account. At the present stage of the Plan preparation, however, the proposed allocations are tentative and provide a broad framework for preparing development programmes by various sponsoring

agencies. After detailed programmes have been drawn up and related to the respective physical targets, the sectoral allocations may have to be reviewed further. The gross Plan size of Rs. 52,000 million is inclusive of expenditure on Works Programme and on anti water-logging and salinity measures in West Pakistan. The total allocation made for the Works Programme amounts to Rs. 2,500 million, of which Rs. 1,500 million will be allocated to East Pakistan and Rs. 1,000 million to West Pakistan. The expenditure on Indus Basin replacement works will continue to be outside the Plan framework as it is covered by a special treaty.

7. The Third Plan proposes to increase the direct investment in agriculture and industry to 41 per cent, compared to an estimated 39 per cent in the Second Plan. Direct investment in agriculture will be 12.2 per cent of the total, but if all the indirect investment for agriculture such as irrigation, flood protection, and manufacture of fertilizer, plant protection material and agricultural equipment is taken into account, total development expenditure for agriculture will constitute over 40 per cent of the total Plan outlay. The proportion of expenditure devoted to economic infra-structure *viz.*, water and power and transport and communications is expected to decline from about 37 per cent in the Second Plan to about 34 per cent in the Third Plan. Expenditure on education will be about three times as high as that during the Second Plan period and, together with the allocation for the health sector and the Works Programme, will account for about 13 per cent of the total development expenditure compared to only 9 per cent in the Second Plan. Allocation for the housing sector will, however, decrease from about 15 per cent in the Second Plan to about 11 per cent in the Third Plan.

IV. REGIONAL DISTRIBUTION

8. Of the total gross Plan size of Rs. 52,000 million, Rs. 34,000 million is allocated to Government financed sector and Rs. 18,000 million to the private sector. The geographical distribution of the proposed allocations is shown in the following table.

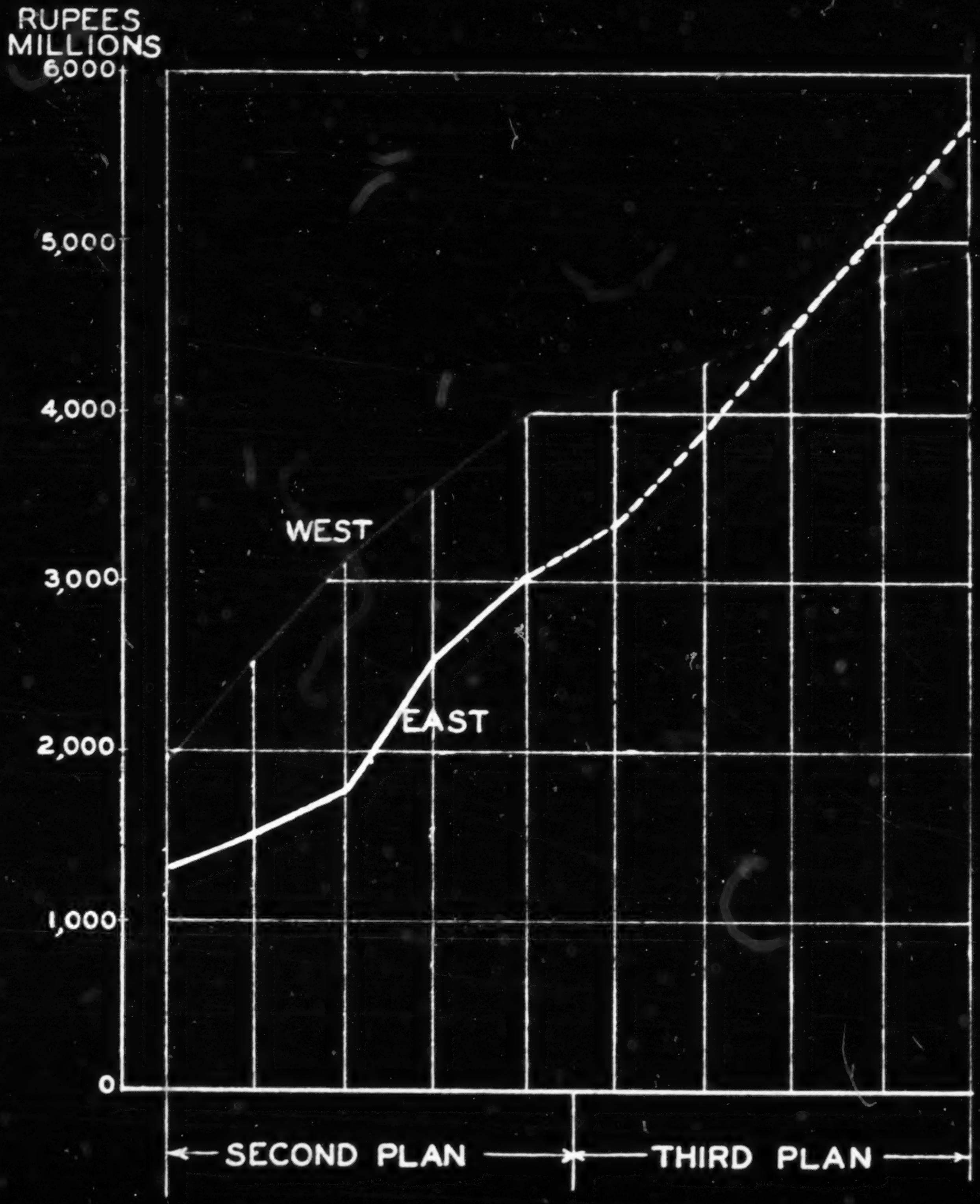
TABLE 2

Regional Distribution of the Total Third Plan Allocation

(Million Rs.)

	East Pakistan	West Pakistan	Total
Government financed programme	18,000	16,000	34,000
Private investment	9,000	9,000	18,000
	27,000	25,000	52,000

DEVELOPMENT EXPENDITURE BY REGIONS
1960–70



The following table gives the sectoral break-up of the allocation to the Government financed sector between the two Provinces.

TABLE 3

Regional Distribution of Public Sector Allocations

(Million Rs.)

Sector	East Pakistan		West Pakistan		All Pakistan	
	Allocation	Percentage	Allocation	Percentage	Total	Percentage
1. Agriculture	2,230	12·5	2,110	13·2	4,340	12·8
2. Water and power ..	3,870	21·5	4,760	29·9	8,630	25·4
3. Industry	3,120	17·4	1,630	10·1	4.750	14·0
4. Fuels and minerals ..	480	2·7	420	2·6	900	2·6
5. Transport and communications.	3,050	16·9	2,820	17·6	5,870	17·3
6. Physical planning and housing.	1,440	8·0	1,300	8·1	2,740	8·0
7. Education	1,475	8·2	1,265	7·9	2,740	8·1
8. Health	640	3·5	540	3·4	1,180	3·5
9. Social welfare ..	110	0·6	90	0·6	200	0·6
10. Manpower	85	0·4	65	0·4	150	0·4
11. Works programme ..	1,500	8·3	1,000	6·2	2,500	7·3
Total ..	18,000	100·0	16,000	100·0	34,000	100·0

9. The allocations for different sectors of the Government financed programme and its regional distribution flow directly from the objectives and strategy of the plan. The relative emphasis on development programmes of various sectors differs in the two wings for a number of reasons, like geographical conditions, the nature of agricultural problems, stage of development and extent of urbanization. Water and power sector, for example, accounts for 30 per cent of the public sector allocations in West Pakistan, whereas the corresponding allocation in East Pakistan is 21 per cent. The relatively larger percentage share in West Pakistan for this sector is due to the necessity of completing a large number of on-going schemes and substantial requirement of water-logging and salinity programme. On the other hand, while industry accounts for 17 per cent of the public sector allocations in East Pakistan, the corresponding percentage in West Pakistan is 10. The higher public investment in industry in East Pakistan is necessitated by the relative paucity of enterpreneurial talent and private capital in that province and the objective of achieving a balance in industrial development of the two wings as early as possible. Social sectors like housing, education, health and social welfare, account for 22 per cent of the public sector allocation in East

Pakistan as compared to 20 per cent in West Pakistan. There are also considerable differences between the intra-sectoral priorities ; for example, in East Pakistan, there is greater emphasis on roads and inland water transport whereas in West Pakistan, expansion of roads and road transport and rehabilitation and improvement of railways will claim about 70 per cent of the total allocation in the public sector.

10. The break-up of the gross allocation of Rs. 34,000 million for the Government-financed sector by executing authorities is given in Table 4 below.

TABLE 4

Government Development Outlay by Executing Authorities

(Million Rs.)

Field of Development	East Pakistan	West Pakistan	Centre	Total
1. Agriculture	1,850	1,810	680	4,340
2. Water and power	3,750	4,400	480	8,630
3. Industry	3,000	1,450	300	4,750
4. Fuels and minerals	210	170	520	900
5. Transport and communications ..	2,360	1,970	1,540	5,870
6. Physical planning and housing ..	1,150	860	730	2,740
7. Education	1,400	1,200	140	2,740
8. Health	600	500	80	1,180
9. Social welfare	100	80	20	200
10. Manpower	80	60	10	150
11. Works programme	1,500	1,000	..	2,500
Total ..	16,000	13,500	4,500	34,000

The gross allocation for the Government of East Pakistan will thus be Rs. 16,000 million, compared to an estimated expenditure of Rs. 5,700 million during the Second Plan *i.e.*, an increase of 180 per cent, the gross allocation for the Government of West Pakistan will be only 105 per cent larger *i.e.*, Rs. 13,500 million compared to Rs. 6,600 million during the Second Plan. The bulk of the Central Programme of Rs. 4,500 million is in four sectors, *i.e.*, transport and communications, physical planning and housing, fuels and minerals, and water and power, and includes the development of telecommunication and postal facilities, broadcasting and television, civil aviation and ports, the construction of capitals at Islamabad and Dacca, geographical surveys, atomic energy and certain research and training programmes of other sectors. It also includes development projects of Azad Kashmir and Northern Regions.

V. PRIVATE SECTOR ALLOCATIONS

11. A development programme of Rs. 18,000 million is proposed in the private sector which is almost twice as high as the estimated investment in the Second Plan. During the First and Second Plan periods, the private sector displayed considerable vitality and dynamism, particularly in sectors like industry, transport and housing, and total private investment has exceeded the Plan targets in both these periods. The proposed allocations for the Third Plan are based on the assumption that, following the recent liberalization of import and investment controls and improvement in the institutional framework for savings and investments, private economic activity will gather further momentum during the Third Plan period, particularly in East Pakistan.

12. A tentative regional and sectoral break-up of the proposed private sector development expenditure is set out in Table 5 below.

TABLE 5

Regional Distribution of Private Sector Allocations

(Million Rs.)

Field of Development	East Pakistan	West Pakistan	Total
1. Agriculture	1,050	950	2,000
2. Water and power	50	250	300
3. Industry	3,800	4,500	8,300
4. Fuels and minerals	300	450	750
5. Transport and communications	1,700	1,400	3,100
6. Physical planning and housing	1,850	1,300	3,150
7. Education	200	100	300
8. Health	20	20	40
9. Manpower	10	10	20
10. Social welfare	20	20	40
Total ..	9,000	9,000	18,000

13. The bulk of allocations in the private sector are proposed for industry, housing, transport and communications. An allocation of Rs. 8,300 million or 47 per cent of total private sector programme is earmarked for industry which in absolute terms will be nearly double the estimated private investment in industry during the Second Plan. In West Pakistan, except for certain key producer goods and heavy industries like fertilizer, machine-tools, petro-chemical complexes and ship-repairing, all other industries like food processing, textiles, hard-board, chemicals and cement will be developed in the private sector. In East Pakistan, as the private capital is comparatively inadequate, some of the industries like sugar, jute manufacturing, newsprint and hard-board, chemicals, cement and steel will be initiated in the public sector with maximum available private participation. The private sector housing programme accounts for 18 per cent of the allocation and will include

the programmes of the local bodies and development authorities, House Building Finance Corporation, industrial and cooperative housing, commercial buildings and private housing. The allocation for private housing in East Pakistan is higher because of acute shortage of housing, particularly in the rapidly growing urban areas and higher costs of construction. The private sector transport and communications programme accounts for 17 per cent of the allocations and will include the programmes of Port Trusts of Karachi and Chittagong, road transport, inland water transport, shipping, P.I.A., television corporation and tourism.

14. The allocations proposed for the private sector should be viewed as broad expenditure targets based on the Plan objectives and priorities rather than as centrally determined specific programmes. Private investment decisions will be made by a large number of people, influenced by market considerations and by incentives or dis-incentives provided by public policy including controls over investment and allocation of foreign exchange. The purpose of indicating a tentative break-up of private development outlay in the Plan is not to tie the private sector in a strait-jacket but to provide guidelines for the private investor as well as public authorities, and also to show the relationship between private and public development expenditures.

VI. ANNUAL PHASING

15. The anticipated annual phasing of the Third Plan compared to the development expenditure in each year of the Second Plan, including the Works Programme, is shown in the following table :—

TABLE 6

Annual Phasing of the Third Plan

(Million Rs.)

	Government Financed Sector	Private Sector	Total
*Second Plan**			
1960-61	1,980	1.230	3.210
1961-62	2,340	1.620	3,960
1962-63	2,860	1,870	4,730
1963-64	3,890	2,260	6.150
1964-65	4,350	2,600	6,950
Total ..	15,420	9,580	25,000
*Third Plan**			
1965-66	4,700	2,900	7,600
1966-67	5,100	3,200	8,300
1967-68	5,500	3,600	9,100
1968-69	5,900	4,000	9,900
1969-70	6,300	4,300	10,600
Total ..	**27,500	18,000	45,500

* Including works programme.

**This is on the basis of the present estimate of resources (cf chapter 5)

16. The suggested phasing of the Third Plan implies an average increase of about 9 per cent *per annum* in the government financed programme and about 12 per cent *per annum* in the private sector programme, compared to an acceleration of about 20 and 25 per cent respectively during the Second Plan period. The proposed annual phasing, as indeed the Plan itself, is essentially a forecast and should be sufficiently flexible to take care of any unexpected changes like abnormal weather, contraction or expansion of resources, changes in the terms of trade and in the availability of foreign aid and loans. The principal instruments for ensuring flexibility and making appropriate adjustments in the plan are the annual development programmes of the Central and Provincial Governments and the economic policies formulated from time to time. Flexibility in planning should not, however, be identified with the relaxation of plan discipline. Changes in the plan should not be allowed to be made without adequate justification.

VII. PROGRAMME PRIORITIES AND PHYSICAL TARGETS

17. The inter-sectoral allocations in the Third Plan are closely knit with the central objective of the Third Plan to increase gross national product by 30 per cent and with the targets set for each field of development on the basis of its past performance and growth potential. The sectoral priorities in the Third Plan compared with the order of priorities followed in the past 15 years are shown in table 7 below :

TABLE 7

Sectoral Priorities in Development Expenditure, 1950-70

(Percentages)

Field of Development	Pre-Plan (1950-55)	First Plan (1955-60)	Second Plan (1960-65)	Third Plan (1965-70)
1. Agriculture	6	7	12	12
2. Industry, fuels and minerals ..	36	31	27	29
3. Water and power	13	17	19	17
4. Transport and communications ..	14	17	18	17
5. Physical planning and housing ..	22	20	15	11
6. Education	5	6	4	6
7. Health	3	2	2	2
8. Manpower and social welfare	1	..	Neg.	1
9. Works programme	..	..	3	5
	100	100	100	100

18. The table brings out clearly the basic strategy that the development plans have followed so far. Upto the end of the Second Plan, an increasing share of the total expenditure has gone into the strengthening of economic overheads, particularly water and power and transport and communications, but a relative decline in the weight of these sectors in total allocations is clearly discernable from the Third Plan period. There is a corresponding increase in allocations to agriculture and to social overheads, particularly education. The share of industry, though in relative terms smaller than the proportionate investments from 1950 to 1960, will be higher than that during the Second Plan and will constitute over 29 per cent of the total allocation for the Third Plan. The expenditure on housing has not been allowed to grow proportionately with total development expenditure in order to release more resources for directly productive sectors. A summary of the main physical targets is given in Appendix A. The basic strategy to be followed in each sector during the Third Plan is outlined in the following paragraphs.

Agriculture

19. Considerable progress has been made during the Second Plan period in strengthening the organizational and institutional framework for agriculture showing justifiable prospects of more rapid development in the Third Plan. The aim is not only to increase the real income of farmers, but also to meet the growing demands of raw materials for industries and for exports. The main physical targets proposed for agriculture sector are : increase of foodgrain production by 25 per cent, cotton production by 35 per cent, jute production by 21 per cent, tea by 27 per cent, sugarcane by 34 per cent and tobacco by 33 per cent. P.L. 480 imports will be used to introduce a cropping pattern which is in the best interest of the economy. The allocation for agriculture sector is Rs. 6,340 million compared to Second Plan allocation of Rs. 3,420 million and estimated actual expenditure of Rs. 2,940 million. The sectoral strategy will be to make the best possible use of the two critical factors of agriculture, *i.e.*, water in West Pakistan and land in East Pakistan and to strengthen further the organizational and institutional framework for agricultural development.

Water and Power

20. The development of water and power resources is of vital importance to both agricultural and industrial growth. In the field of water development, the programme will cover maximum possible irrigation facilities and try to meet the menacing threats of water-logging and salinity in West Pakistan and flood control in East Pakistan. It is proposed to irrigate an additional area of 3.6 million acres and improve an area of 11 million acres through drinage, flood-protection, anti-water logging and salinity and other measures. It is proposed to increase the power capacity installed by 1,365 MW, from 1,435 MW in 1964-65 to 2,800 MW in 1969-70.

Industry

21. Within this sector, the major emphasis will be on heavy producer goods industries in order to meet the country's growing requirements of capital goods and machinery by domestic production and thereby reduce the country's dependence on foreign assistance. It is expected that the domestic production of capital goods will increase from about Rs. 500 million in 1965 to Rs. 1,000 million by 1970. The industrial programme will also seek to diffuse as far as possible the benefits of industrialization by establishing a number of industrial centres in various parts of the country. The private sector will be encouraged to invest in as many industries as possible, but certain key industries where the extent of present demand may not justify more than one or two optimum plants, may be retained in the public sector to avoid monopolies or concentration of economic power. The main physical targets in the industries sector are : cotton textiles, 620 million lb. of yarn which will allow cloth consumption to increase from about 14 yards per head in 1964-65 to 15.5 yards per head in 1969-70 and leave an exportable surplus of 250 million yards of cloth and 100 million lbs. of yarn per annum ; white sugar, 640,000 tons ; cigarettes, 30,000 million ; tea 79 million lbs ; cement 5 million tons ; steel 1.2 million tons. In addition, substantial capacity will be installed for the production of petro-chemicals, machine tools and heavy engineering and electrical equipment.

Fuels and Minerals

22. The total allocation of Rs. 1,650 million will include Rs. 900 million in the public sector and the balance in the private sector. Due to rapid growth in industries and transport sectors, the demand for fuels and minerals will rise steeply. During the Third Plan, geological investigations for the discovery of various minerals and prospecting of oil and gas will be intensified. Gas distribution in West Pakistan will be expanded and a beginning made in the transmission and distribution of gas for industry and general development in East Pakistan. Coal production in West Pakistan is proposed to be doubled. Special attention will also be paid to the exploitation of recently discovered coal deposits in East Pakistan.

Transport and Communications

23. The transport and communications programme has been based on the requirements of the agricultural and industrial programmes, urbanisation and the need for balanced regional development. In East Pakistan, the main emphasis will be on inland water transport, roads and air services whereas in West Pakistan, the road programme will receive greater priority. Adequate provision has also been made for railways to improve their efficiency by measures like rehabilitation of rolling stock, strengthening of tracks, introduction of block signalling and centralized traffic control system. The Plan also provides for improving the

existing port facilities at Karachi and Chittagong and converting Chalna anchorage into a permanent major port, and considerable development of the national merchant fleet.

24. The Third Plan proposes a total programme of Rs. 980 million for the tele-communication services and it is expected that 150,000 additional telephones will be provided and telegraph and telephone services and inter-wing communications will be further improved. Postal services, particularly in the rural areas, will be expanded by opening 2,000 new post offices, thereby raising the total number to 13,500. This will on the average provide one post office for a population of 10,000. Television facilities will be expanded with greater emphasis on educational programmes.

Physical Planning and Housing

25. Apart from accelerating the construction of the Capital at Islamabad and the second Capital at Dacca, the growing need for urban and rural housing, slum clearance, water supply, sewerage and drainage facilities has been accorded priority. The organisation for physical planning at different levels will be strengthened for promoting a balanced growth of urban and rural communities. The problem of settlement of a large number of Muslim refugees who have recently been displaced from India will be given special attention.

Education and Training

26. The main object of education and training sector programme will be to widen the base of primary education and greatly increase the facilities for technical and vocational education. Particular attention will be paid to reduce the currently high drop out rate at the primary level. At the secondary stage, emphasis will be on the introduction of diversified courses and greater facilities for students in industrial arts, agricultural, commercial and home economics. In the field of higher education, existing colleges and universities will be consolidated for improving the academic standards and quality of instruction. The teacher education programme will be expanded for providing increased facilities for training in scientific, vocational and technical subjects. The educational research programme of the Institutes of Education and Research and other related organisations will be strengthened. A larger scholarship programme will be maintained to support meritorious students whose own resources are not adequate to cover their educational expenses. Adequate provision has also been made for adult education, promotion of arts, culture and sports.

Health, Manpower and Social Welfare

27. In the health sector, main emphasis will continue to be on preventive measures ; about 60 per cent of the allocation will be provided for preventive programmes such as eradication of malaria, tuberculosis

control and health education. The curative services will include provision for 17,000 additional hospitals beds and 400 rural health centres. Family planning has been accorded high priority and an allocation of Rs. 150 million made for this programme.

28. In manpower and employment sector, adequate provision has been made for increasing the number of trained workers, management and productivity development, employment service and workers education, industrial relations, social security of workers and industrial welfare. Similarly, in social welfare sectors, provision has been made not only for consolidating and expanding the existing preventive, curative and rehabilitative social services but also to initiate new programmes to meet untackled social problems.

Works Programme

29. The Third Plan provides a Works Programme of Rs. 2,500 million : Rs. 1,500 million in East Pakistan and Rs. 1,000 million in West Pakistan. The experience of the Works Programme under the Second Plan has been very encouraging. The main objectives of the Works Programme are to utilize the surplus manpower, specially in rural areas, to create rural economic infra-structure, and to initiate a process of democratic planning from below. If these objectives are achieved in all the Divisions and Districts, Pakistan will have discovered a *via media* of paramount importance to promote her economic growth in keeping with her political objectives and without unduly disturbing the traditional way of life of the people.

CHAPTER 5

RESOURCES AND FINANCING

The size of the Third Plan can be finally determined only after a careful evaluation of the recent experience under the Second Plan, the growth possibilities that exist in various sectors of the economy, and the expenditure that will be necessary to exploit these possibilities to the maximum. At the same time, it should be based on a careful assessment of the resources that can be mobilised, both domestically and from abroad. Tentatively, the gross size of the Third Plan has been fixed at Rs. 52,000 million. It is not possible to give a precise idea of the net investment at this stage. The preliminary estimates of resources indicate an availability of Rs. 45,500 million. These estimates are described in this chapter. The estimates are currently being re-examined to determine the extent to which the gross Plan size of Rs. 52,000 million can be financed.

I. SOURCES AND USES OF NATIONAL RESOURCES

2. The capacity of the economy to generate resources for development has increased quite significantly in recent years. The experience of the first four years of the Second Plan, which has become available only recently and has not yet been fully evaluated, shows that the country will experience an average annual growth rate of nearly 5 per cent during this period. Even assuming a modest performance in the last year of the Second Plan, the Plan target of 24 per cent increase in national income will certainly be exceeded. Table 1 presents tentative benchmarks for 1964-65 on the basis of recent analysis of GNP, exports, imports, investment and savings.

TABLE 1

Resources and Expenditures, 1959/60 and 1964/65

(Million Rs. ; 1964-65 prices)

	1959-60	1964-65	Index for 1964-65 (1959-60=100
A. *Resources* :			
Gross national product at factor cost	34,770	43,930	126
Indirect taxes net of subsidies	1,450	2,300	159
Gross national product at market prices	36,220	46,230	128
Imports of goods and services	3,740	6,800	182
Total national resources	39,960	53,030	133
B. *Expenditure* :			
Private consumption	30,420	37,280	123
Public consumption	3,400	4,350	128
Gross fixed capital formation*	3,450	8,200	238
Changes in stocks	400	250	62
Total domestic expenditure	37,670	50,080	133
Exports of goods and services	2,290	2,950	129
Total expenditures on national resources	39,960	53,030	133

*Includes current expenditures included in the public sector development expenditures.

3. As can be seen from this table, the GNP at factor cost is expected to increase by more than 26 per cent over the Second Plan period, while the increase in GNP at market prices is likely to be 28 per cent. Including imports, the total availability of resources is expected to increase by 33 per cent, to a level of about Rs. 53,000 million in 1964-65 prices. The increase in national resources will enable capital formation to more than double itself by 1964-65 while private and public consumption will increase by 23 and 28 per cent respectively. Exports in constant 1964-65 prices are likely to rise by about 29 per cent as against a 82 per cent increase in imports over this period.

4. The projections of national resources for the Third Plan period are summarised in Table 2.

TABLE 2

Sources and Uses of National Resources in the Third Plan

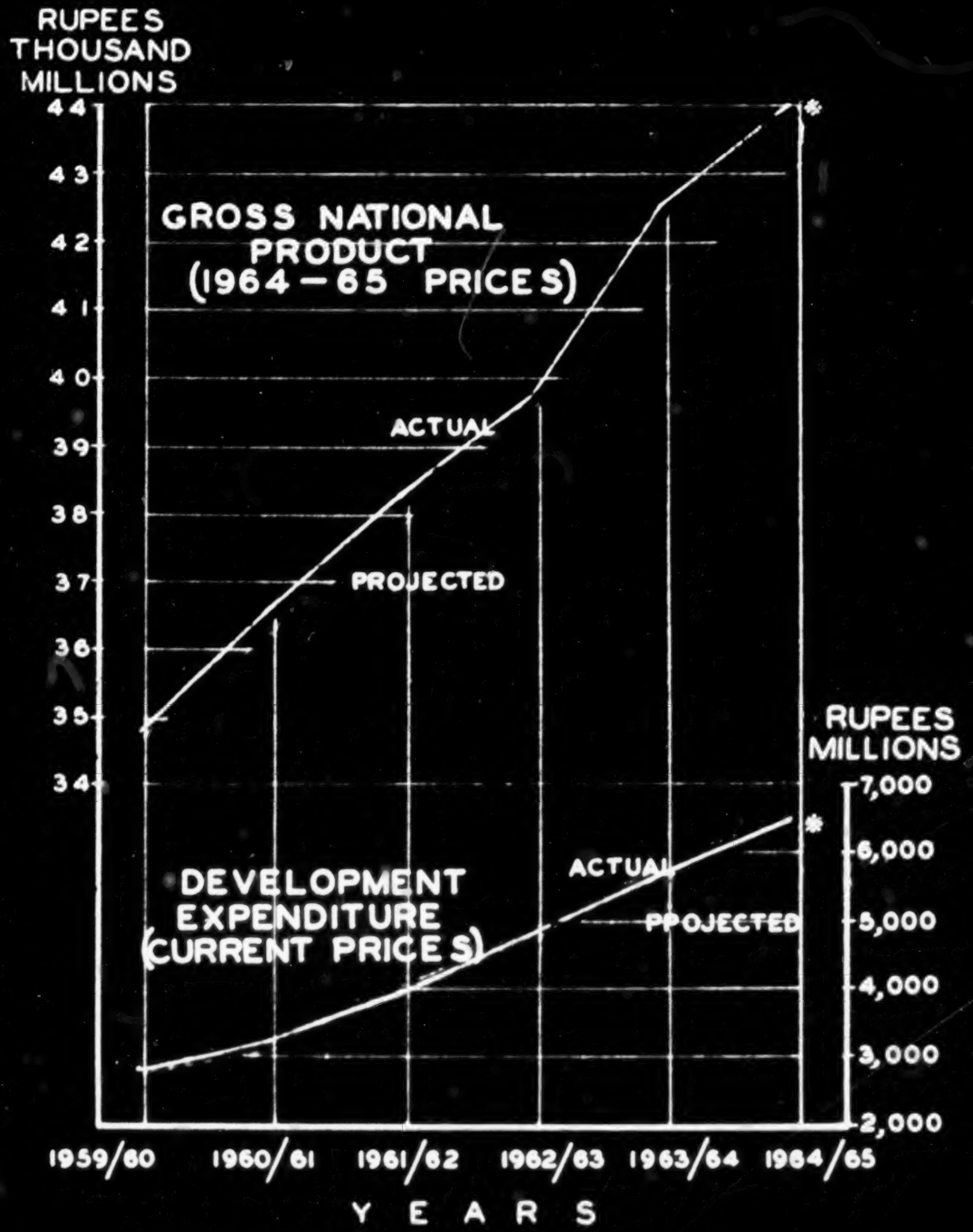
(Million Rs. ; 1964-65 prices)

			As a percentage of GNP	
	1964-65	1969-70	1964-65	1969-70
A. *Sources* :				
Gross national product at market prices	46,230	60,800	100·0	100·0
Net external resources*	3,850	4,320	8·3	7·5
Total ..	50,080	65,120	108·3	107·5
B. *Uses* :				
Development expenditure (incl. Works Programme).	6,950	10,600	15·0	17·4
Other investment expenditures.* ..	1,500	1,350	3·3	2·3
Consumption expenditures. ..	41,630	53,170	90·0	87·8
Total	50,080	65,120	108·3	107·5

* Include Indus Basin expenditure and non-monetized investment.

For the time being, the GNP is assumed to increase by about 30 per cent over the Third Plan period even though the recent experience under the Second Plan demonstrates the possibility of fixing higher targets for growth rate before the Plan is finalized. The marginal rate of saving is assumed to be somewhat higher in the Third Plan than in the Second when about one-fifth of the additional income is expected to be saved and reinvested. It may be possible to raise the target for the Third Plan after further work has been done in this field. Tentatively,

PROJECTIONS AND REALIZATIONS DURING THE SECOND FIVE YEAR PLAN



*) PROVISIONAL

it is estimated that about Rs. 29,000 million will be available by way of domestic savings in the Third Plan. It is expected that another Rs. 16,500 million can be raised from foreign assistance. Leaving aside foreign private investment, technical assistance, and P.L. 480 assistance, the level of external assistance envisaged in the Third Plan implies an annual commitment of about $ 600 million. This will mean only a slight acceleration above the current rate of commitment of $ 500 million and it is hoped that foreign assistance of this magnitude will be forthcoming.

II. FINANCING OF THE GOVERNMENT SECTOR

5. The estimated availability of resources in the public sector is Rs. 27,500 million. It is expected that over 50 per cent of the public sector development programmes will be financed from domestic sources, compared to only 43 per cent during the Second Plan. A substantial portion of increased public savings is expected from larger surpluses from existing taxes and from capital receipts, but about one-third of the total domestic finance must come from the imposition of new taxes and deficit financing. A detailed breakdown of these estimates by main items is given in the following table but each of these may need further analysis and revision. In particular, the relative roles that additional taxation and deficit financing can play in financing the gap must be determined yearly at the time of budget formulation in the light of a careful review of fiscal and monetary situation.

TABLE 3

Resources for the Government Financed Sector

(Million Rs.)

	Second Plan		
	Target	Revised Estimates	Third Plan Projection
Domestic Resources			
Surplus on revenue account (*a*)	1,920	2,160	7,300
Net capital receipts	1,400	1,460	1,900
Local bodies	200	200	300
Additional taxation	1,750	1,800	3,000
Deficit financing	Nil	660	1,500
	5,270	6,280	14,000
External Resources			
Project loans (including technical assistance)	5,250	3,510	7,000
Commodity loans	3,500	3,420	5,500
P.L.480 counterpart funds	600	1,410	1,000
	9,350	8 340	13,500
Total resources	14,620	14,620	27,500
Domestic resources as a percentage of total	36%	43%	51%
Foreign resources as a percentage of total	64%	57%	49%

(*a*) Includes customs receipts on commodity aid where applicable.

The assumptions on which these estimates are based are explained in the following paragraphs.

Surplus on Revenue Account

6. During the Second Plan period, revenue surplus has become an increasingly important source of financing the development expenditure of the Government sector. The revenue surplus is expected to increase from Rs. 30 million in 1959-60 to Rs. 1,270 million by 1964-65. This major increase in revenue surplus will be possible because the revenue receipts of the three Governments are estimated to increase at an annual rate of about 15 per cent while the increase in non-development expenditure is being kept within 9 per cent per annum. In fact, excluding debt servicing and recurring expenditure of the development departments, the increase in administrative expenditure has been only 5.5 per cent per annum in the Second Plan. The projections for the Third Plan are summarized in Table 4 below. These projections represent the agreed conclusions emerging from the consultations between the Planning Commission, Ministry of Finance, State Bank and the Provincial Governments. Further work is in progress on some of these estimates.

TABLE 4

Projections of Revenue Surplus from Existing Taxes

(Million Rs.)

Budgetary Head	1959-60 at 59-60 rates	1964-65 at 64-65 rates	1969-70 at 64-65 rates	Total Third Plan period at 64-65 rates
(A) Revenue receipts				
Customs	560	982	1,060	5,320
Excise duties	370	850	1,370	5,705
Sales tax	310	735	1,030	4,590
Income and corporation tax ..	370	633	1,070	4,350
Land revenue	220	307	300	1,475
Other taxes	170	353	480	2,140
Total taxes ..	2,000	3,860	5,310	23,580
Non-tax revenues	640	1,514	2,710	10,460
Total revenue receipts	2,640	5,374	8,020	34,040
(B) Non-development expenditure				
Defence	960	1,297	1,430	6,890
General administration	880	1,126	1,320	6,460
Development departments ..	460	817	1,490	5,755
Debt services	310	864	2,120	7,635
Total non-development expenditure	2,610	4,100	6,360	26,740
Surplus on revenue account ..	30	1,270	1,660	7 300

7. On a review of the major tax receipts for the last four years (1959-60 to 1962-63), it appears that these receipts, even after excluding the effects of additional taxation during the period, increased quite appreciably. The increase in excise duties was faster than the rise in the production of excisable goods ; customs and sales tax moved more or less in line with total imports and large scale industrial production ; and income and corporation taxes increased much faster than the increase in non-agricultural income. The rate of increase of these taxes is projected to be somewhat lower during the Third Plan because of the change in the composition of imports in favour of low-duty capital goods, domestic production of capital goods yielding lower excise duties, and the expected redistribution effects of fiscal measures. The elasticities of the four major taxes in relation to their determining variables have been calculated for the last four years and modified elasticities have been worked out on the basis of agreed projections for 1969-70. These are shown in the following table. Detailed work is now proceeding to check up and refine the estimates for customs and excise duties.

TABLE 5

Elasticities of Major Tax Receipts

Tax Receipts	Determining Variables	Elasticity	
		1959-63	Third Plan Assumption
Customs ..	.. Total imports	1·0	0·3
Excise duties	.. Production of excisable goods ..	1·5	0·8
Sales tax	.. Total imports and large-scale industrial production	0·9	0·8
Income and corporation tax.	Non-agricultural income	1·8	1·5

8. In projecting non-developmental expenditure, adequate provision has been made for strengthening the administrative machinery, particularly the development departments, for meeting defence expenditure, and the rising debt servicing liability. The annual increase in defence and administrative expenditures is projected at 2 and 3 per cent respectively during the Third Plan period. The recurring expenditure of development departments will rise much faster, at about 12 per cent per annum, while debt servicing liability is projected to increase sharply at a rate of 20 per cent per annum. The projected total revenue receipts and total non-developmental revenue expenditures are likely to result in a revenue surplus of Rs. 7,300 million over the Third Plan period.

Net Capital Receipts

9. Net capital receipts during the Second Plan did not show as much buoyancy as revenue surplus, especially because of the substantially increased liability on account of repayment of foreign loans. Even so, these resources, along with estimated contribution from local bodies, are likely to yield Rs. 1,660 million against the Plan target of Rs. 1,600 million. The tentative projections of net capital receipts (excluding local bodies) add up to Rs. 1,900 million for the Third Plan period, as given in Table 6 below :

TABLE 6

Projections of Net Capital Receipts

(Million Rs. ; 1964-65 prices)

	1964-65	1969-70	Total Third Plan
A. Capital receipts			
1. Small savings	130	170	770
2. Public borrowings (non-bank)	83	85	390
3. Depreciation and other reserve funds ..	200	270	1,240
4. Other receipts	117	175	650
Total receipts :	530	700	3,050
B. Capital liabilities			
1. Repayment of foreign loans	83	280	900
2. Other liabilities	67	40	250
Total liabilities ..	150	320	1,150
Net capital receipts ..	380	380	1,900

Additional Taxation

10. Additional taxation is the most important weapon that the Government can use not only to raise additional resources but to influence the direction of economic policies. This is all the more important in an economic frame-work where administrative controls are gradually being withdrawn and taxes and subsidies have necessarily to be used as regulatory measures. The National Economic Council has already appointed a high-level Commission on Taxation and Tariffs to review the possibilities of additional taxation in the Third Plan, to suggest ways and means for improving the efficiency of the tax collecting machinery, and to recommend the rationalisation of the existing tariff structure. The report of the Commission is expected to be available before the Plan is finalised so that its findings will be fully reflected in the final Plan.

11. The projections of tax revenues at current rates of taxation as given in Table 4, show that the tax receipts will increase at about the same rate as the G.N.P. This means that, unless additional taxation is imposed, the Government will be capturing only about 9 per cent of the G.N.P. in taxes by 1969-70, *i.e.*, the same proportion as in 1964-65. This is too low a proportion in view of the increasing development responsibilities of the Government and the long-run target of capturing about 20 per cent of the G.N.P. in the form of taxes by the end of the Perspective Plan. Tentatively, the feasibility of raising about Rs. 3,000 million of additional resources by way of new taxes in the Third Plan is being examined. Even considering the additional taxation of Rs. 3,000 million, the share of the G.N.P. collected by the Government in taxes will be only 11 per cent by 1969-70. This is an issue, however, which cannot be judged merely on the basis of over-all percentages but has to be decided by examining concrete possibilities of additional taxation and the likely effects of this taxation on saving, investment, prices and production.

12. There are several areas which need careful examination from the point of view of raising additional resources. The coverage of excise duties and sales tax can be extended and their rates rationalised further. The need for continuing generous tax concessions to industry may have to be reviewed. Similarly, ways and means must be devised to capture some of the increase in agricultural productivity in the form of taxes, particularly because productivity of agriculture is estimated to increase quite rapidly during the Third Plan period. The Government has already raised about Rs. 1,800 million in additional taxes during the Second Plan period. The momentum of this effort must be maintained in the Third Plan. However, a specific target can only emerge after the Commission on Taxation and Tariffs has completed its report.

Deficit financing

13. Economic growth generates an ever increasing need for money and credit. In the process of satisfying this need, the public sector gains command over resources. Thus, during the Second Plan period, deficit financing of the public development effort is now estimated at Rs. 660 million. The corresponding figure for the Third Plan has been set at Rs. 1,500 million.

14. It is in the nature of any projection of the extent of deficit financing that the figure adopted can only be a very tentative estimate, depending as it does on many uncertain elements of future developments. The Third Plan estimate of deficit financing is neither a target to be achieved nor a rigid limit that cannot be over-stepped. A close watch must be kept on the economic situation as it actually unfolds itself through the

Third Plan period, and judgements must continuously be formed on what monetary and fiscal policies will be appropriate for dealing with imbalances in the economic and monetary situation. The safe and appropriate role of deficit financing in annual budgets must be determined at the time of budget making; short-term monetary policy must continue to play an important role in keeping the economy on an even keel. A plan can merely provide the broad framework within which considerable scope for policy manipulation remains.

15. With this important proviso, an estimate of Rs. 1,500 million of deficit financing is being tentatively suggested for the Third Plan period. It is provisionally estimated that the total money supply may have to increase by about Rs. 4,000 million to accommodate the expanding requirements of the private sector. The major considerations that underlie these estimates are discussed in the following paragraphs.

16. Resources that can be made available to the public sector through deficit financing without disturbing monetary equilibrium depend on various factors including (a) the nature of the monetary situation at the opening of the period for which projections are made, (b) the rate of overall monetary expansion which would meet the needs of the economy without resulting in undue pressures on prices and on the balance of payments, (c) the rate of credit creation in the private sector not offset by mobilisation by the banking system of private savings; and (d) additional resources available from external assistance.

17. In formulating the Second Five-Year Plan, the estimates of deficit financing and of expansion of money supply were set fairly conservatively. In fact, no provision was made for deficit financing, and the rate of expansion of money supply was projected exactly in proportion to the planned increase in national income. This caution was justified in view of the considerable monetary overhang from the First Plan period. The rate of monetary expansion was kept very low during the first two years of the Second Plan which allowed the excess liquidity in the economy to be absorbed through the growing demand for money in the economy. In the third and fourth years of the Second Plan period, however, money supply rose rapidly, by about Rs. 950 million per annum. This monetary expansion has been well-absorbed by the economy: prices have remained remarkably stable, while the balance of payments situation has permitted considerable liberalization of imports.

18. The basis of monetary policy is changing every year as the economy grows. It is significant that the comfortable food situation in the country, coupled with the availability of PL 480 imports in substantial quantities, provides an important cushion against unforeseen pressures on prices and the cost of living. Also, domestic requirements of essential

consumer goods over a wide range are now met by a greatly expanded industrial sector which can respond quite readily to increased effective demand in the country. In addition, a relatively comfortable foreign exchange situation, a reasonably satisfactory level of inventories and the absence of latent demand pressures carried over from the Second Plan period are all pointers in favour of a less conservative approach than was adopted for the Second Plan period.

19. At the same time, however, the possibility of unforeseen fluctuations in the money market as a result of the operations of private individuals and institutions is increasing. During the Second Plan period there has been a remarkable extension of private banking facilities which has stimulated credit creation by the banking system and the flow of private savings to the banks and other private finance institutions. As a result of the growth and expansion of these institutions and of their activities, the public is holding a large supply of near-money substitutes, such as time-deposits in banks, postal saving deposits, postal saving certificates, prize bonds, National Investment Trust Units etc., which can be easily converted into cash at short notice. In the projections for the Third Plan, it is assumed that there will be a continuous increase in private savings, as well as a shift in preference from currency hoards to savings placed in financial institutions. However, the possibility of a conversion of these assets as a result of an inflationary psychology represents a major uncertainty in any judgement of the future development of the monetary situation.

20. On the basis of considerations discussed in the preceding paragraphs and particularly the experience since 1961-62, the projections of the amount of deficit financing (Rs. 1,500 million) and of the likely expansion in money supply (Rs. 4,000 million) over the 5-year period must be regarded as conservative. It would be important to watch the monetary situation as it unfolds during the Third Plan period and to strike the right balance between the counsels of caution against inflationary pressures and the real needs of the economy for supply of monetary means to support rapid economic growth.

III. FINANCING OF THE PRIVATE SECTOR

21. The performance of the private sector in respect of fixed capital formation has exceeded the targets set in the Second Plan. Originally, it was estimated that private investment would amount to Rs. 8,380 million but, according to the current estimates, this figure may be about 15 per cent higher, *i.e.*, Rs. 9.580.

22. In Table 7 a comparison is made between the original and revised estimates of private sector financing of investment during the Second Plan period.

TABLE 7

Financing of the private sector during the Second Plan

(Million Rs. ; current prices)

	Original estimates	Revised estimates
Loans and credits in foreign exchange	1,600	1,020
Private foreign investment	600	420
Private domestic savings	6,180	8,140
Total ..	8,380	9,580

23. This table shows clearly that the larger investment programme resulted exclusively from higher domestic savings, which more than compensated for the shortfall in the availability of external resources. Present estimates of private savings are about 31 per cent above the original projections of the Second Plan.

24. Savings mobilised by the private sector in the Second Plan can be compared with the growth of production in those sectors where savings were generated. On this basis, it is possible to project the amount of savings that will probably be forthcoming in the private sector at about Rs. 15,000 million during the Third Plan. As this projection is based on estimates of the sectoral growth of the gross national product in constant prices, and no allowance is made for increased bank advances to the private sector, this figure must be considered to be a minimum estimate.

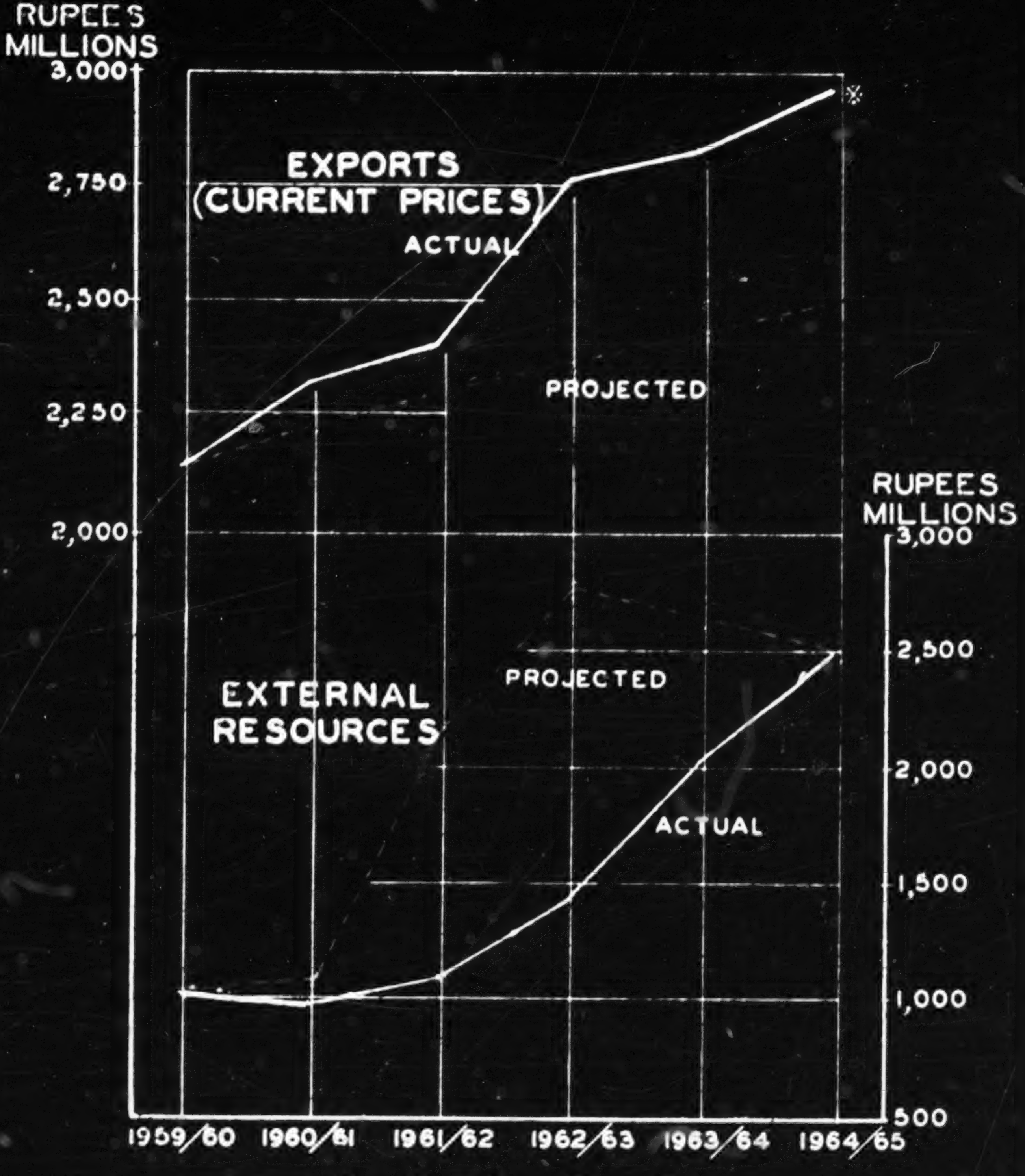
25. Even though foreign loans and credits to the private sector fell short of the Second Plan expectations, their level has been increasing each year. In fact, the shortfall resulted mainly from the low level at the beginning of the Second Plan, being only Rs. 40 million, but in subsequent years a steep increase is noticeable, leading to an estimated inflow of Rs. 410 million in 1964-65.

26. For the Third Plan, an estimate of foreign loans and credits to the private sector of Rs. 2,300 million can thus be considered as fairly reasonable. In addition, foreign private investment is estimated for the Third Plan at Rs. 700 million, bringing the total of external resources to the private sector to Rs. 3,000 million.

IV. EXTERNAL RESOURCES

27. The total external resources required for the Third Plan are estimated at Rs. 15,500 million of foreign exchange and Rs. 1,000 million of P.L. 480 counterpart funds. The composition of these resources, together with the corresponding estimates for the Second Plan, is shown in the following table.

PROJECTIONS AND REALIZATIONS DURING THE SECOND FIVE YEAR PLAN



(※) PROVISIONAL

TABLE 8

Estimated External Resources for the Third Plan

(Million Rs.)

	Second Plan	Third Plan
Project loans and grants	4,170	8,800
Commodity aid	3,420	5,500
Technical assistance	360	500
Private foreign investment	420	700
Total resources in foreign exchange	8,370	15,500
P.L. 480 counterpart funds	2,210	1,000
	10,580	16,500
Total Plan outlay including works programme	25,000	45,500
External resources as a percentage of total Plan outlay ..	42%	36%

28. Thus external resources will decrease from 42 per cent of the total resources in the Second Plan to 36 per cent in the Third, though in absolute terms the inflow of external resources will be about 56 per cent larger. There was a sharp acceleration in the utilization of external assistance during the last two years of the Second Plan. Compared to the estimated level of external resources in 1964-65, the level expected in 1969-70 will be only 24 per cent larger and will increase from Rs. 2,750 million in 1964-65 to Rs. 3,400 million in 1969-70. If the outflow on account of increased debt servicing liability is excluded, the corresponding increase will be only 10 per cent as shown in the following table :

TABLE 9

Foreign Assistance during 1960-70

(Million Rs. ; 1964-65 prices)

	1959-60	1964-65	1969-70
Total foreign assistance	1,580	2,750	3,400
Minus debt servicing	—80	—300	—700
Net inflow of resources	1,500	2,450	2,700

29. The proposed phasing of external assistance and the main assumption regarding project aid, commodity aid, and private foreign investment are explained in the following paragraphs.

Project Aid

30. The unutilized balance in the project aid pipe line at the beginning of the Second Plan, *i.e.*, in 1960-61, was about Rs. 900 million, but

is likely to increase to Rs. 4,000 million at the end of the Second Plan because most of the project aid was committed in 1962-63 and 1963-64 and is likely to be disbursed during the Third Plan period. Thus, about 45 per cent of the project aid disbursement in the Third Plan will be covered by assistance committed during the Second Plan. On the basis of the past relationship between commitments and disbursements, however, fresh commitments amounting to Rs. 7,800 million will be required to meet the expected year to year disbursements during the Third Plan, as shown in the following table.

TABLE 10

Annual Phasing of Project Aid during the Third Plan

(Million Rs.)

Year	Fresh Commitments	DISBURSEMENTS					Undisbursed balance as on 30-6-1970
		1965-66	1966-67	1967-68	1968-69	1969-70	
Pipeline as on 30-6-1965 ..	4,000	1,470	1,080	660	490	300	..
1965-66	1,300	130	460	390	190	130	..
1966-67	1,450	..	140	510	430	220	150
1967-68	1,500	..	..	170	580	490	410
1968-69	1,800	..	..	..	180	620	1,000
1969-70	1,600	..	..	..	..	160	1,440
	7,800	1,600	1,680	1,730	1,870	1,920	3,000

31. These estimates assume that the average period over which the project aid will be fully disbursed will become slightly longer because of the changing composition of the development programme, and that about 10 per cent of committed funds will be disbursed in the first year, 35 per cent in the second year, 30 and 15 per cent in the third and fourth years respectively and the remaining 10 per cent in the fifth year. These estimates also include project assistance channelled to the private sector through PICIC and IDBP. The volume of such assistance during the Second Plan period is estimated at Rs. 1,020 million and is expected to increase to Rs. 2,300 million during the Third Plan period. The balance in the project aid pipeline is expected to shrink by about Rs. 1,000 million over the Plan period.

Commodity Aid.

32. The balance in the commodity aid pipeline at the beginning of the Second Plan was Rs. 500 million and is expected to remain at that

level by the end of the Second Plan. The experience so far shows that about 50 per cent of the commodity aid is disbursed within 12 months of its commitment. On the basis of this relationship, it appears that fresh commitments amounting to Rs. 5,700 million would be required to meet the annual disbursements projected for the Third Plan, as shown in the following table :

TABLE 11

Annual Phasing of Commodity Aid during the Third Plan

(Million Rs.)

Year	Fresh Commitments	DISBURSEMENTS					Un-disbursed balance as on 30-6-1970
		1965-66	1966-67	1968-69	1968-69	1969-70	
Pipeline as on 30-6-65	500	400	100	..	..	..	..
1965-66	1,100	580	420	100	..	..	..
1966-67	1,100	..	520	480	100	..	..
1967-68	1,100	..	..	520	480	100	..
1968-69	1,200	..	..	..	600	500	100
1969-70	1,200	..	..	..	..	600	600
Total ..	5,700	980	1,040	1,100	1,180	1,200	700

33. The projected utilization of commodity aid during the Third Plan assumes a continuation and expansion of the import liberalization programme and a broader definition of commodity aid. The average level of commodity aid disbursements during the Second Plan period has been Rs. 680 million per annum. However, in recent years, the quantum of commodity aid disbursements is increasing and is expected to reach a level of Rs. 1,000 million in 1964-65. It is expected that in the first two years of the Third Plan this level will be maintained but will increase to about Rs. 1,200 million by 1969-70. The balance in the pipeline at the end of the Third Plan will be slightly higher than that at the beginning of the Third Plan.

Private Foreign Investment :

34. The estimates of private foreign investment during the Third Plan imply a 70 per cent increase compared to that in the Second Plan. This increase may be possible to achieve if efforts to secure greater foreign investment are intensified and the measures taken by the U. S. Government to strengthen the institutional framework for channelling private foreign investment to under-developed countries prove successful.

Technical Assistance :

35. The need for technical assistance is likely to continue during the Third Plan period despite considerable strengthening of the domestic institutional framework. Technical assistance can play a useful role only if it is related closely to the expanding requirements of the economy in those areas in which local expertise will take time to develop. At the same time, there must be a well-defined long-range programme to fill

in all the critical areas by training local talent. A Committee is already evaluating the role played by technical assistance so far with a view to recommend measures for its more effective budgeting and utilisation. The Committee will also define the proper role of foreign consultants. On a provisional basis, technical assistance requirements are estimated at Rs. 500 million for the Third Plan compared with Rs. 360 million for the Second Plan.

P. L. 480 Programme :

36. The detailed requirements of imports under the P. L. 480 programme have not yet been determined, but tentatively it is estimated that the total absorption of P. L. 480 commodities during the Third Plan period will be Rs. 3,800 million ($ 800 million). This will mean an annual rate of absorption of Rs. 760 million and will be only slightly more than the average rate of Rs. 700 million achieved during the last two years of Second Plan. The composition of P. L. 480 programme and the yearly requirements will be determined largely by domestic production, price trends and the success of specific policies to achieve a more appropriate cropping pattern, but it is expected that about 50 to 60 per cent of the proposed programme will be devoted to wheat imports, about 20 per cent to cotton seed and soyabeen oil, about 10 per cent to feedgrain and the remaining allocation will be utilized for items such as tallow, dry milk, long staple cotton, butter oil, tobacco and other small items.

37. On the basis of tentative estimates presented above, total accruals of P. L. 480 programme are expected to be Rs. 4,000 million, of which about Rs. 1,000 million may be available for the Third Plan as shown in the following table.

TABLE 12

Estimates of PL-480 Resources for the Third Plan

(Million Rs. ; 1964-65 prices)

Accruals		*Uses*	
Expected arrivals ($800 million) ..	3,800	U.S. uses	400
Customs and sales tax	200	Indus Basin requirements. ..	2,200
		Lump sum provision for subsidy	400
		Available for the Third Plan	1,000
	4,000		4,000

CHAPTER 6

BALANCE OF PAYMENTS

The balance of payments projections and the numerous explicit and implicit policies on which they depend constitute one of the most crucial elements of the Third Plan. These projections and policies will require careful and continuous review during the Plan period in the light of future trends and changes.

2. A marked improvement in the balance of payments situation of the country during the past four years has been one of the most heartening features of the Second Plan performance. This improvement must be consolidated and accelerated during the Third Plan. The Second Plan had estimated that foreign exchange earnings would increase from Rs. 2,127 million in 1959-60 to Rs. 2,450 million in 1964-65 and total earnings during the period would be Rs. 11,250 million. Total imports were projected at Rs. 22,200 million, Rs. 8,450 million in the form of capital goods imports and Rs. 13,750 million as non-development imports. The gap of Rs. 10,950 million was to be covered by external resources. It now appears that the country's own earnings have been increasing at about 6 per cent per annum against only 3 per cent forecast in the Plan and total earnings during the five-year period will be about Rs. 13,170 million, *i.e.*, Rs. 1,920 million more than anticipated earlier. Total imports during the Plan period are expected to be Rs. 21,440 million *i.e.*, Rs. 760 million less than the original estimate. The resultant foreign exchange gap to be covered by external assistance and foreign exchange reserves during the 5-year period will, therefore, be only Rs. 8,370 million. These estimates are presented in greater detail in Annexure I to this chapter.

3. During the Third Plan period total imports of goods and services are estimated at Rs. 34,000 million, increasing at the rate of 7 per cent per annum, from about Rs. 5,700 million in 1964-65 to Rs. 7,670 million in 1969-70. The rate of increase in imports during the Second Plan period was much faster *i.e.*, about 15 per cent per annum. The exports of goods and services are expected to increase at the rate of 7.5 per cent per annum, from about Rs. 2,950 million in 1964-65 to Rs. 4,250 million in 1969-70, yielding a total of Rs. 18,500 million during the Plan period. The foreign exchange gap to be covered by external resources is estimated at Rs. 15,500 million. The tentative annual phasing of the balance of payments for the Third Plan period is shown in Annexure II to this Chapter. These exclude imports under the P. L. 480 Programme and for the Indus Basin replacement works. The P.L. 480 Programme has been discussed in Chapter 5.

I. IMPORT REQUIREMENTS

4. For the Third Plan period as a whole, total development imports are estimated at Rs. 21,100 million, which is 62 per cent of all imports,

approximately the same share as has been realized during the Second Plan period. The proportion of development imports would have increased to about 70 per cent, had it not been for the unavoidable increase in foreign debt servicing. For both development and non-development imports, however, raw materials for domestic production are projected to account for an increasing proportion relatively to finished products.

5. This distinction between development and non-development imports is based on the revised classification of imports adopted by the Central Statistical Office in 1963. According to the new classification, development imports comprise not only finished capital goods but also raw materials for production in domestic capital goods industries as well as technical assistance services. Earlier, such materials and services were not classified as development imports in spite of their development character. The significance of this change in classification is that it allows a more realistic assessment of the extent to which imports contribute to the development effort or to meeting rising consumption needs. The revised ratio of development imports to development expenditure on the basis of the new classification during the Second Plan period and that anticipated for the Third Plan is shown in the following table :

TABLE 1

Foreign Exchange Component of Development Expenditure

	Second Plan		Third Plan	
	Million Rs.	Percentage	Million Rs.	Percentage
1. Development expenditure (including Works Programme).	25,000	100	45,500	100
2. Total development imports of which :	13,270	53·1	21,100	46·4
2·1 capital goods	(9,620)	(38·5)	(14,840)	(32·6)
2·2 raw materials for development and technical assistance.	(3,650)	(14·6)	(6,260)	(13·8)

6. The maintenance of a high proportion of development goods in total imports in the Third Plan is in accordance with the Plan's strategy for further stimulation of savings and investments, as explained in Chapter 3. Thus, of the planned increase in Gross National Product from 1964-65 to 1969-70, about 77 per cent is assumed to be spent on consumption needs. Of the planned increase in imports, however, only 38 per cent or half as much is assumed to be for consumption. The policy of rapid increase in exports and imports over the Third Plan period,

coupled with policies that maintain a composition of imports in favour of development goods, will therefore be an important element in the strategy of stimulating savings and containing consumption.

Development Imports

7. Imports of capital goods are expected to increase at 3.5 per cent per annum from a level of Rs. 2,350 million in 1964-65 to Rs. 2,900 million in 1969-70 but development expenditures are expected to increase more rapidly. As a result, the ratio of capital goods imports to total development expenditure will decrease from an estimated 38 per cent in the Second Plan period to 33 per cent during the Third Plan period. This decrease in the requirements of capital goods imports is partly due to the changing composition of the development programme and partly the expansion of domestic capacity to produce a number of important capital goods. The allocations of water and power and transport and communications sectors, where the foreign exchange component is higher than the average, have been reduced from 37 per cent in the Second Plan to 34 per cent in the Third Plan. Similarly, the allocations for education and health, where the foreign exchange component is much lower than the average and for the Works Programme, which uses very little imported materials, have been increased from 9 per cent in the Second Plan to 13 per cent in the Third Plan. The decrease in foreign exchange requirements on account of the preceding two factors will be counter-balanced to some extent by larger investments in heavy industries during the Third Plan, but the domestic production of capital goods, such as tractors, pumps, trucks, machine tools, locomotives, diesel engines and electrical equipments, will increase from a level of about Rs. 500 million per year in 1964-65 to about Rs. 1,000 million in 1969-70.

8. The full impact of these changes on the import programme can be accurately judged only when the sectoral development programmes have been further elaborated and when the potential for domestic production of capital goods has been assessed in greater detail. The proposed reduction in the dependence on imported capital goods is, however, an important step in the long-term strategy of reducing capital goods imports to around 10 per cent of development expenditure by the end of the Perspective Plan.

9. Imports of raw materials for capital goods and other development programmes in the Third Plan are expected to be about 70 per cent higher than in the Second Plan and will thus constitute a slightly larger proportion of total imports.. While domestic production of capital goods must be expanded as rapidly as possible, the industrial programme must be so designed as to minimize the corresponding increase in the import of raw materials. For this purpose, the import substitution effort will be intensified to cover materials such as iron and steel, chemicals and other synthetic products.

Non-Development Imports

10. Total non-development imports and payments are expected to increase from an expected level of Rs. 2,070 million in 1964-65 to Rs. 2,960 million in 1969-70. These include consumer goods imports, raw materials for consumer goods, all invisible payments and debt servicing.

11. Consumer goods imports excluding PL-480 commodities decreased from a level of Rs. 510 million in 1960-61 to Rs. 490 million in 1964-65, mainly on account of the decrease in food imports from the country's own resources. About one-fourth of the total consumer goods imports are against bonus vouchers. The estimates for the Third Plan provide for only a gradual increase in consumer goods imports, from Rs. 490 million in 1964-65 to Rs. 600 million in 1969-70. The suggested increase will cover the inevitable increase in consumer goods imports against bonus vouchers and the demand for such essential goods as medicines and books. The bulk of remaining demand for consumer goods is expected to be met by increased domestic production.

12. Imports of raw materials for consumer goods, which increased from Rs. 320 million in 1960-61 to an estimated Rs. 720 million in 1964-65, are expected to rise to Rs. 850 million by 1969-70. The rate of increase during the Third Plan period is expected to be slower than that in the Second Plan for two reasons. Firstly, a larger proportion of total industrial investment in the Third Plan will be devoted to capital goods industry rather than consumer goods industry. Secondly, the level of raw material imports in 1964-65 will be fairly high following the gradual liberalization of the import policy during the Second Plan period. The rate of increase during the Third Plan will not therefore be as rapid as in the preceding three years.

13. Payments for services on private account are likely to increase to some extent because of increased remittance of profits on foreign investment. On the other hand, some economies in such payments will be possible with the development of insurance and shipping services. Therefore, an increase of only about 20 per cent in invisible payments has been assumed during the Third Plan period. The liability on account of debt servicing is expected to increase from Rs. 300 million in 1964-65 to Rs. 700 million in 1969-70 and will be about 16 per cent of foreign exchange earnings compared to about 10 per cent in 1964-65. The estimate is tentative and assumes some improvement in the terms on which foreign loans will be available during the Third Plan.

14. Total non-development imports during the 5-year period are thus estimated to be Rs. 12,900 million. Since total foreign exchange earnings, are expected to be Rs. 18,500 million, foreign exchange totalling Rs. 5,600 million will be available from the country's own earnings to finance developmet imports. During the Second Plan period, the surplus

of exchange earnings over non-development imports was about Rs. 5,000 million. The increasing availability of such surpluses is necessary to secure greater flexibility in programming development imports.

II. PROJECTIONS OF EXPORT EARNINGS

15. One of the most important objectives of the Third Plan is to increase exports at a rate faster than the growth of the Gross National Product. While the planned increase in the GNP is 30 per cent over the Third Plan period, exports are stipulated to grow by 43 per cent, corresponding to an average rate of about 7.5 per cent per annum.

16. Developments during the Second Plan period have laid a good basis for intensification of the export drive in the Third Plan. The export performance during the Second Plan, yielding a 6 per cent average annual increase, has been considerably better than the rate of under 3 per cent assumed in the Plan itself. The improvement in foreign exchange earnings, compared to Second Plan targets is attributable to exports of raw cotton (Rs. 340 million more than planned), raw jute (Rs. 100 million) jute manufactures (Rs. 80 million), wool (Rs. 30 million), hides and skins (Rs. 20 million), miscellaneous exports (Rs. 600 million) and invisible earnings (Rs. 1,000 million), partly counterbalanced by a shortfall of Rs. 250 million in the export earnings of cotton manufactures.

17. The export targets for the last year of the Third Plan compared to actual exports in 1959-60, 1962-63, and estimated earnings in 1964-65 are shown in Table 2.

TABLE 2

Export Earnings during 1960-70

(Million Rupees ; current prices)

Items	1959-60 (Actual)	1962-63 (Actual)	1964-65 (Estimates)	1969-70 (Targets)
Raw jute	729	840	800	800
Jute manufactures	227	320	360	840
Raw cotton	189	390	400	500
Cotton manufacturers ..	231	90	150	300
Hides and skins	83	80	70	80
Wool	75	90	90	90
Rice	45	120	150	250
Fish	50	100	90	200
Newsprint and paper ..	..	10	10	50
Other exports	198	210	280	500
Invisibles	300	500	550	640
Total ..	2,127	2,750	2,950	4,250

18. These targets of export earnings are based on the planned expansion in the production of exportable surpluses and on an assessment of market outlets. The rationale and assumptions underlying the projections in respect of each major item of exports are explained in the following paragraphs of this chapter. All projections are based on fairly conservative price assumptions. In the case of raw cotton, cotton manufactures and jute manufactures, the projections assume prices which are lower than the average price level of the preceding three years from 1961-62 to 1963-64. For other items, prices are expected to maintain the average level of these three years. This average excludes 1960-61 which was exceptionally favourable and in which the index of unit value of exports improved to 165 (1959-60 = 100). The index deteriorated to 130 in 1961-62 and to 116 in 1962-63. If international prices, particularly for the major export earners cotton and jute, should show some improvement during the Third Plan, the export targets for 1969-70 may, in fact, be exceeded.

Raw Jute.—Total production of raw jute by 1969-70 is estimated at 8.0 million bales. Domestic consumption of raw jute, after taking into account the targets for jute manufactures, discussed in the next paragraph, is estimated at 3.8 million males, leaving an exportable surplus of 4.2 million bales. If the prices of raw jute during the Third Plan period maintain the level of Rs. 195 per bale, which represents the average price during the preceding three years (1961-62 to 1963-64), earnings from raw jute may maintain the existing level of Rs. 800 million. Thus, the main object will be to stabilize the level of jute exports between Rs. 800 and Rs. 850 million, allowing the bulk of additional production to be exported in manufactured form.

Jute manufactures.—The estimate of earnings from the export of jute manufactures, is based on the following assumptions regarding production, domestic consumption and prices :

TABLE 3

Export of Jute Manufactures, 1965—70

	1964-65	1969-70	
	All Looms	Ordinary Looms	Broad Looms
1. Installed loomage	12,000	25,000	2,000
2. Looms in effective operation	10,500	20,000	1,800
3. Total production (tons)	370,000	600,000	120,000
4. Domestic absorption (tons)	90,000	120,000	..
5. Exportable surplus (tons)	280,000	480,000	120,000
6. Average export price (Rs.)	1,300	1,250	2,000
7. Export earnings (Million Rs.)	360	600	240

These estimates imply that the world demand for jute manufactures, particularly in the Afro-Asian region and the centrally planned economies will increase at a faster rate in future and that Pakistan will be able to capture a proportionately larger share of the increase in world demand. Currently, Pakistan's total exports of jute manufactures constitute about 10 per cent of the world consumption of jute manufactures. The export targets for the Third Plan assume that this proportion will increase to about 20 per cent by 1969-70. About half of the total increase in the export of jute manufactures is expected to be from broad loom products.

Raw Cotton.—Cotton production during the Second Plan period is expected to increase by about 40 per cent, from 1.7 million bales in 1959-60 to 2.2 million bales in 1964-65. The production target for 1970 is currently being estimated at 3.0 million bales which may be exceeded if the required inputs are provided. The exportable surplus of raw cotton will be between 1.1 and 1.2 million bales after meeting a domestic demand of about 1.9 million bales compared to 1.4 million bales in 1963-64. Average prices during the period 1960 to 1963 have been Rs. 430 per bale but, in view of the need to market a larger exportable surplus, a somewhat lower average price between Rs. 420 and Rs. 425 per bale has been assumed for the Third Plan. On the basis of these assumptions, total earnings from raw cotton may approach a level of Rs. 500 million per annum by 1969-70.

Cotton manufactures.—The gross production of cotton yarn by 1969-70 is estimated at 620 million lbs. of yarn of which about 410 million lbs. will be utilized to manufacture 2,200 million yards of cotton cloth. The *per capita* consumption of cloth is expected to increase from 14 yards in 1965 to 15.5 yards in 1970, requiring 1950 million yards of cloth for an estimated population of 129 million. The exportable surplus of cotton textiles will thus be 250 million yards. Of the remaining 210 million lbs. of yarn, about 110 million lbs. is expected to be required for uses other than cloth and about 100 million lbs. may be available for export. Assuming an average price of Rs. 0.70 per yard for cloth and Rs. 1.50 per lb. of yarn, total earnings from the export of cotton manufactures may increase from about Rs. 150 million in 1964-65 to Rs. 340 million by 1969-70 but, to account for any unfavourable developments, a lower target of 300 million would be more realistic. During the past few years, the export of cotton manufactures has been showing a very erratic trend. Having reached a record level of Rs. 231 million in 1959-60, export earnings from cotton manufactures slumped to Rs. 50 million in 1961-62, but may again increase to Rs. 125 million in 1963-64 and to Rs. 150 million in 1964-65. Any sizeable expansion in the export of cotton manufactures in future will, however, encounter serious hurdles. Many importing countries are currently imposing restrictions of one kind or another and the pressure of domestic consumption from a rising population will continue to reduce the exportable surplus. The target for the Third Plan is based on the assumption that there will be some relaxation of restrictions in the importing countries and appropriate fiscal and price policies will be adopted to divert the projected volume of textiles into the export market.

Hides and skins.—The export of hides and skins has been following a rising though a fluctuating trend. The average annual exports during the period 1953-58 have been Rs. 36 million but increased to an average of Rs. 60 million during the period 1958-63, the best year being 1959-60, when total earnings were Rs. 83 million. It is expected that the output of hides and skins will continue to expand at the same rate as in the preceding period, but their domestic absorption will increase at a faster rate. Exports during the Third Plan period will, therefore, increase only gradually, and may reach a level of Rs. 80 million by 1969-70. The exports of manufactured leather and boots and shoes is however expected to increase from Rs. 20 million in 1962-63 to Rs. 50 million in 1969-70.

Wool.—The production of wool in 1962-63 was 37 million lbs. compared to 23.8 million lbs. in 1948-49. This represents an average increase of about 4 per cent per annum but during the last six years the annual increase has been about 3 per cent. If the trend of the last six years is maintained during the Third Plan period, the total production of wool in 1969-70 would be 46 million lbs. The current domestic consumption of wool is 9 million lbs. which includes 4 million lbs. for the cottage industry and 5 million lbs. for the woollen industry which in addition to indigenous wool uses about 3.5 million lbs. of imported wool. The total consumption of domestic wool after taking into account increasing domestic manufacture of worsted wool tops, may reach about 11 million lbs. in 1969-70, leaving an exportable surplus of 35 million lbs. The average price of wool during the Third Plan period, on the basis of the trend observed during the past 5 years may be between Rs. 2.50 and Rs. 2.60 per lb. Earnings from wool may be Rs. 90 million per annum towards the end of the Plan period.

Rice.—During the First Five-Year Plan rice was not a very significant item of export, but has become an important source of earning since 1958-59. The value of exports has risen from Rs. 22 million in 1958-59 to Rs. 112 million in 1961-62 and further to Rs. 120 million in 1962-63 when about 140 thousand tons of superior rice were exported. The production of rice in West Pakistan is expected to increase from about 1.3 million tons in 1964-65 to about 1.8 million tons in 1969-70 of which superior varieties may account for about 500 thousand tons. Allowing for domestic consumption of 200 thousand tons, the exportable surplus will be about 300 thousand tons. The current price for Basmati rice is Rs. 1,120 per ton and for other qualities Rs. 680 per ton, but assuming a somewhat lower average price of Rs. 1,000 per ton for basmati and Rs. 600 per tons for others, total earning from rice is expected to about Rs. 250 million by 1969-70.

Paper and Newsprint.—Paper has not been a major item of export during the Second Plan but in 1962-63 newsprint valued at Rs. 8 million was exported. Since the production of newsprint and mechanical paper is expected to increase from 56 thousand tons in 1964-65 to 70 thousand tons in 1969-70, the exportable surplus, after allowing an estimated domestic consumption of 45 thousand tons, will be 25 thousand tons. Assuming a price of Rs. 700 per ton, earnings are expected to be about 17.5 million in the last year of the Third Plan. The production of writing paper is expected to increase much faster, from about 30 thousand tons in 1964-65 to 100 thousand tons in 1969-70. Allowing for a domestic consumption of 65 thousand tons, the exportable surplus in 1969-70 is estimated at about 35 thousand tons which at the current price of Rs. 1,200 per ton is expected to yield a sum of Rs. 42 million in foreign exchange. Total earnings from news print and paper together are thus likely to be between Rs. 50 and 60 million by the end of the Third Plan.

Fish.—The export of fish and fish products has increased from Rs. 32 million in 1958-59 to Rs. 72 million in 1961-62 and Rs. 100 million in 1962-63. It is expected that this level will be sustained in 1963-64 and 1964-65. The total production of river and marine fish in 1962-63 was 329,000 metric tons. The Third Plan target of fish production is 473,000 metric tons, of which about 25 per cent is likely to be exported if measures proposed to develop marine fish and fish industry are properly implemented. Total earnings for fish on the above basis would have been around Rs. 250 million by 1969-70, but in view of the difficulties experienced recently in obtaining adequate supplies of shrimps and prawns, an export target of Rs. 200 million for fish has been suggested to be achieved by the end of the Third Plan.

Miscellaneous exports.—Miscellaneous exports have been expanding gradually during the last few years and amounted to Rs. 210 million in 1962-63 compared to Rs. 203 million in 1961-62. About half of these exports consist of minor primary products such as cotton waste, oil cakes, fruit and vegetables, etc., while the remaining half are manufactured items like sports goods, leather and carpets. It is estimated that these miscellaneous exports will increase to about Rs. 500 million by 1969-70, the manufactured goods increasing at much faster rate than minor primary products. Many new items such as cement, petrochemicals and fertilizers are also expected to enter the export market during the Third Plan. It is proposed to examine the export potential of each item of miscellaneous exports and fix more specific targets for all products which are likely to earn more than Rs. 10 million in a year.

III. COMMERCIAL POLICIES

Import Policies

19. The Second Plan witnessed a gradual but decisive liberalization of the economy from the restrictive aspects of import controls. The

liberalization programme was accompanied by appropriate fiscal policies to keep a check on consumption, to curb unnecessary accumulation of inventories and to prevent undue substitution of local material and labour by imported goods and services. During the Third Plan period, the shift from direct to indirect controls will continue. The list of items on the free import list will be examined, revised and extended where necessary, to secure a full and effective use of the country's development potential. At the same time, the tariff structure and fiscal policies will be reviewed and reshaped to ensure the best possible use of available foreign exchange resources, the rapid growth of capital goods industry and optimum efficiency of domestic consumer goods industry. In the past, tariff concessions have generally been given on an *ad hoc* basis and primarily to protect consumer goods industry. With the rapidly changing composition of the industrial programme, it is necessary to review the tariff structure to provide increasing protection to domestic capital goods industry, without increasing the cost of imports in those fields where domestic production constitutes a very small proportion of total imports.

20. The necessity of retaining controls on the import of capital goods for new industries and for major extensions will continue during the Third Plan, but an increasing proportion of total resources for private industrial investment will be channeled through the development banks.

21. The Third Plan assumes that imports of consumer goods will increase at a rate slower than the increase in national income. For all but essential consumer goods in short supply, the containment of growth of import can be effected through the price mechanism, through increased taxes and other financial measures. For some unessential consumer goods, however, import prohibition or quantitative regulation will continue to be appropriate.

Export Policies

22. Policies for achieving the export targets of the Third Plan will have to be pursued vigorously, including policies for rapid expansion of production, policies for containment of domestic consumption of exportable products and a determined and imaginative policy for the development of market outlets abroad.

23. The Third Plan export targets imply a significant structural change in the composition of the country's exports in favour of manufactured goods, without foregoing the importance of the agricultural exports in which Pakistan can enlarge its share of the world market, such as cotton and rice. Manufactured exports, which are expected to account for nearly 30 per cent of the total exports in 1964-65, are expected to increase to about 45 per cent of the total in 1969-70.

24. The export performance planned for the coming five-years will require a major shift in the country's approach towards industrialization : from import substitution to export industries. Besides improving the efficiency of the industrial sector generally, new fields in which Pakistan has export potential must be determined as early as possible and steps taken to divert the required investment and skills to these fields. This is reflected in the programmes for the industrial sector.

25. For most products, both agricultural and industrial, for which exports are planned, domestic consumption constitutes an alternative market. It will be necessary, therefore, to adopt fiscal and other measures to restrain consumption of exportable commodities and channel increased production into the export market. The institutional framework for exports will also have to be considerably strengthened.

26. The changing composition of exports will also necessitate a change in the direction of the country's exports. In 1962-63 about 52 per cent of total exports went to Western countries, 43 per cent to Afro-Asian countries, mainly Hong Kong and Japan, and only 5 per cent to socialist countries. While efforts to expand traditional exports to Western countries must continue, the projected increase in the export of manufactures may not materialise without a significant expansion of the country's trade within the Afro-Asian region and with the socialist countries. It is in this context that the move for regional cooperation between Iran, Turkey and Pakistan assumes greater importance.

27. The export bonus scheme has played an important role in stimulating the export of manufactured goods. Exports covered by the Bonus Scheme are expected to increase from Rs. 670 million in 1960-61 to Rs. 900 million in 1963-64. The actual working of the scheme had, however, become cumbersome due to a multiplicity of bonus rates and frequent changes in the market value of bonus vouchers. Recently, the scheme has been rationalized by unifying all the different rates into two rates *viz.* 30 per cent and 20 per cent. The scheme will be continued into the Third Plan, but its impact on different items will be carefully watched. The ultimate objective must be to reduce and gradually eliminate the dependence of our industries on the export bonus scheme, by strengthening export incentives through other fiscal measures and increasing the efficiency of our industrial units. A systematic review of production costs is also urgently needed to increase the competitive position of our industries in the world market.

Annexure 1

Balance of Payments for the Second Plan

(Million Rs.)

	1960/61 (Actual)	1961/62 (Actual)	1962-63 (Actual)	1963-64 (Estimate)	1964-65 (Projection)	Total 2nd plan
Development Imports :						
Capital goods ..	1,240	1,310	1,630	2,150	2,350	8,680
Raw materials for capital goods ..	470	500	500	670	830	2,970
Freight charges ..	140	230	200	320	370	1,260
Technical assistance ..	60	70	70	80	80	360
Total ..	1,910	2,110	2,400	3,220	3,630	13,270
Non-Developments Imports :						
Consumer goods ..	540	430	340	430	490	2,230
Raw materials for consumer goods ..	320	470	510	640	720	2,660
Freight charges ..	80	100	90	100	110	480
Debt servicing ..	100	120	170	220	300	910
Invisibles	330	330	370	410	450	1,890
Total ..	1,370	1,450	1,480	1,800	2,070	8,170
Total Imports ..	3,280	3,560	3,880	5,020	5,700	21,440
Financed by :						
Own earnings	2,290	2,380	2,750	2,800	2,950	13,170
Exports	(1,880)	(1,920)	(2,250)	(2,290)	(2,400)	(10,740)
Invisibles	(410)	(460)	(500)	(510)	(550)	(2,430)
Project assistance ..	390	560	670	1,100	1,450	4,170
Non-project assistance ..	470	440	630	880	1,000	3,420
Technical assistance ..	60	70	70	80	80	360
Private foreign investment	90	90	80	80	80	420
Foreign exchange reserves	—60	100	—310	80	140	—50
Other short term capital movements ..	40	—80	—10	—	—	—50

Note.—P.L. 480 and Indus Basin imports are excluded from the above table.

Annexure 2

Balance of Payments Projections for the Third Plan

(Million Rs.)

	1965-66	1966-67	1967-68	1968-69	1969-70	Total 3rd Plan
Development imports :						
Capital goods ..	2,400	2,600	2,700	2,800	2,900	13,400
Raw material for capital goods ..	850	900	1,000	1,180	1,270	5,200
Freight charges ..	380	390	400	410	420	2,000
Technical assistance ..	80	90	100	110	120	500
Total ..	3,710	3,980	4,200	4,500	4,710	21,100
Non-Development Imports :						
Consumer goods ..	520	540	560	580	600	2,800
Raw material for consumer goods ..	740	800	860	930	980	4,310
Freight charges ..	120	120	125	130	135	630
Debt servicing ..	400	450	510	575	700	2,635
Other invisibles ..	460	480	510	530	545	2,525
Total ..	2,240	2,390	2,565	2,745	2,960	12,900
Total imports ..	5,950	6,370	6,765	7,245	7,670	34,000
Financed by :						
Own earnings	3,200	3,450	3,685	3,915	4,250	18,500
External Resources : ..	2,750	2,920	3,080	3,330	3,420	15,500
Project assistance ..	(1,600)	(1,680)	(1,730)	(1,870)	(1,920)	(8,800)
Non-project assistance	(980)	(1,040)	(1,100)	(1,180)	(1,200)	(5,500)
Technical assistance ..	(80)	(90)	(100)	(110)	(120)	(500)
Private foreign investment	(90)	(110)	(150)	(170)	(180)	(700)

Note.—(1) P. L. 480 and Indus Basin imports are excluded from the above table.

(2) The annual phasing of exports shown above is uneven because of the need to balance the table. Shortfalls or increases in actual exchange earnings will lead to corresponding adjustments in the exchange reserves.

CHAPTER 7

REGIONAL DEVELOPMENT

The vast and geographically divided area of Pakistan obviously calls for a regional approach in development planning. Moreover, according to Article 145, clause (3) of the Constitution, a primary object in plan formulation "shall be to ensure that disparities between the Provinces, and between different areas within a Province, in relation to income *per capita* are removed and that the resources of Pakistan (including resources in foreign exchange) are used and allocated in such a manner as to achieve that object in the shortest possible time". The Third Five-Year Plan must, therefore, seek to implement this Constitutional provision to the maximum extent possible.

2. The extent of disparity in *per capita* income is difficult to measure. The National Income Commission is currently examining the estimates of regional income for East and West Pakistan. Most of the questions regarding the measurement of income disparity, capital output ratios and investment requirements can be settled once the Commission has finalized its report. The final Plan will be based on the estimates given by the National Income Commission.

I. PROGRESS DURING THE SECOND PLAN

3. Substantial progress is being achieved during the Second Plan period in accelerating the pace of economic development in East Pakistan. East Pakistan's share of public sector net resources is estimated to have risen from 36 per cent in 1959-60 to 47 per cent in 1963-64. The gross budgeted allocations for 1964-65 provide East Pakistan for the first time with a margin above West Pakistan, Rs. 2,050 million compared to Rs. 1,950 million. In addition, East Pakistan is being allocated Rs. 250 million for the rural works programme as against Rs. 150 million for West Pakistan.

4. Behind the increasing share of total resources lies a story of rapid growth of public development expenditures in East Pakistan, a rate double that in West Pakistan. For 1960-61 it is estimated that public development expenditure in East Pakistan, including the allocation of Central expenditures, amounted to Rs. 810 million. For 1964-65, these expenditures are projected at nearly Rs. 2,000 million, an increase of nearly 150 per cent. The comparable figures for West Pakistan are Rs. 1,170 million for 1960-61, rising to nearly Rs. 2,000 million in 1964-65, an increase of about 70 per cent.

5. In the private sector, the record is unfortunately less favourable. While estimates can be made only on the most tentative basis, it is believed that East Pakistan's share is approximately one-third of the

total. Even so, actual investment has been increasing at a rapid rate. It is estimated to rise from Rs. 450 million in 1960-61 to Rs. 900 million in 1964-65, an increase of about 100 per cent.

6. With regard to the total development programme, public and private, it is estimated that total development expenditure would rise from Rs. 1,260 million in 1960-61 to Rs. 2,900 million in 1964-65 in East Pakistan, an increase of about 130 per cent. In West Pakistan, the expected rise is from about Rs. 2,000 million in 1960-61 to Rs. 3,700 million in 1964-65, an increase of 85 per cent. The estimates in the private sector, it should be noted, are highly tentative, but the overall order of magnitude is believed to be reasonably accurate.

II. THE TASK DURING THE THIRD PLAN

7. This is good progress which should hearten all of us. Nevertheless, the task of the Third Plan, as the First Plan prepared under the new Constitution, must be to press forward by seeking out every practicable means of removing disparities as rapidly as possible. A great responsibility rests upon all concerned with framing the Third Plan, to ensure that it faithfully reflects this national objective, now valued and accepted by all who subscribe to the ideals of Pakistan. It is not an easy task and will require candour, frank and realistic appraisal of economic feasibility on the one hand, and goodwill by all concerned on the other.

8. The Planning Commission has carefully reviewed the back-ground of economic tensions between the two provinces and explored every possibility of diminishing them. After full and frank discussion, it is the considered judgement of the Planning Commission that the only approach to the problem consistent with our national solidarity is to give the provinces large and increasing independence in the execution of their development plans, to assure them increasing participation in the framing of a co-ordinated national Plan and to make clear the firm resolve of all concerned in planning, in the Provinces and at the Centre, not only to remove every restriction that has impeded expansion in East Pakistan, but to take such positive measures as are necessary to facilitate and encourage East Pakistan's growth. In particular, measures must be taken to ensure that East Pakistan receives a steadily rising share of total development resources and that the rate of increase is limited only by the feasibility of using resources effectively.

9. In adopting measures to remove disparities in *per capita* income, it is necessary to face up to causes and difficulties involved in overcoming them. Nothing can be accomplished by exaggerated promises and unrealistic expectations. The nation cannot afford self-delusion in facing its most difficult problem. The origin of these disparities lies in deep-seated factors that have been operating for generations. There are

disparities in national resources. Massive gas deposits were discovered in West Pakistan long before they were found in East Pakistan. There are differences in the pressure of increasing population on the land, in the pace of urbanization and the industrialization that goes hand in hand with it. It is now the firm resolve of the people of Pakistan to surmount these factors. However, it is not realistic economics to expect that the work of long historical processes can be undone within a few years. The gas resources will have to be converted into electrical energy. Upon this base industries will have to be built and towns and cities enlarged. Transportation will have to be provided to bring them their raw materials and carry their output. Engineers and technicians will have to be trained and managers developed, in both private and public sectors. All this must be planned and engineered before implementation can begin.

10. Thus, while it may confidently be predicted that disparities in income can ultimately be eliminated, this is not a realistic goal for the Third or even the Fourth Plan. Given a dedicated effort, it may be feasible, however, to eliminate disparities completely within the period of the Perspective Plan, that is within the next four Plan periods. It is proposed that this be made a national target, with as a corollary the commitment to take every necessary and practicable measure to achieve it as rapidly as possible.

11. It would be a serious mistake to think that financial resources are all that is necessary to meet the problem. Resources can be wasted and produce no benefit. If they are to contribute to development they must be used wisely, effectively, and productively. This depends not on steel and concrete but upon men, organization, experience ; on the capability to plan and implement an effective development programme. There is also need for detailed studies and investigations to prepare sound projects in many sectors. The task now is to find means of removing existing deficiencies as quickly as possible, for good organization and trained staff are pre-requisites to sound development, no matter what financial resources are available. This is not an easy task and quick results are not to be expected.

12. The private sector is also much less developed in East than in West Pakistan, again largely for historical reasons going back to Independence and before. This places East Pakistan at a serious disadvantage, for private industry has proved the most dynamic force in West Pakistan's development. In part, this element in disparity can be remedied by greater reliance on the public sector. But this is not a complete answer, since public sector capability is limited and will be fully extended to perform the tasks which only

the Government can undertake. Therefore, efforts must be made to foster rapid growth of the private sector in East Pakistan, if necessary by unconventional means.

13. More rapid development of East Pakistan will require a substantial increase in the rate of investment there. The Third Plan earmarks Rs. 27,000 million for East Pakistan out of a total gross Plan size of Rs. 52,000 million. It is tentatively estimated that this would lead to an increase of 34 per cent in the national product of East Pakistan compared with 27 per cent in West Pakistan. If these growth rates are achieved, the interprovincial disparity in *per capita* income may be reduced by one-fifth. Whether these targets can be achieved with the proposed investment needs to be examined in the light of the results of investigations regarding capital-output ratios in East and West Pakistan and other related factors.

III. INTER-REGIONAL ALLOCATIONS

14. The regional allocations in the Third Plan are summarized in the table below.

TABLE

Regional Allocations in the Third Plan

(Million Rs.)

	East Pakistan	**West Pakistan**	**Total**
Central programme	2,000	2,500	4.500
Provincial programme	16,000	13,500	29,500
Total public sector	**18,000**	16,000	**34,000**
Private sector	9.000	9.000	1,800
Total allocation	**27.000**	**25 000**	**52,000**

15. In the public sector, an allocation of Rs. 18,000 million in East Pakistan and Rs. 16,000 million in West Pakistan is proposed to provide East Pakistan with a margin of Rs. 2,000 million during the Third Plan period as a whole, and an average annual margin of Rs. 400

million. The proposed allocation means for East Pakistan an increase from 46 per cent of the public sector total during the Second Plan to 53 per cent during the Third Plan. Under these proposals, net public sector expenditures in East Pakistan will rise from an estimated Rs. 7,000 million during the Second Plan to Rs. 18,000 million in the Third, an increase of about 150 per cent. In West Pakistan, they will rise from an estimated Rs. 8,400 million during the Second Plan to Rs. 16,000 million during the Third, an increase of nearly 90 per cent.

16. In the private sector it is proposed that Rs. 18,000 million should be allocated equally to East and West Pakistan. In East Pakistan, this means an increase from an estimated level of Rs. 3,300 million during the Second Plan, *i.e.*, an increase of about 173 per cent. In West Pakistan, it means an increase from an estimated Second Plan total of Rs. 6,300 million, or about 43 per cent. East Pakistan's share of private sector expenditures is planned to rise from an estimated 35 per cent during the Second Plan period to about 50 per cent during the Third. West Pakistan's share is due to decrease from 65 per cent during the Second Plan period to 50 per cent during the Third. Given the dynamism of the private sector in West Pakistan, there is every reason to believe that the suggested programme can be mounted effectively. In East Pakistan, every effort will be made to nurture the private sector, but ultimately the result must depend on the energies of the private sector itself.

17. The total resource allocations for the two provinces, on the basis of the proposals for the public and private sectors, amount to targets of Rs. 27,000 million for East Pakistan and Rs. 25,000 million for West Pakistan. The reasons which have led to these recommendations are as follows :

(a) The margin in the public sector in favour of East Pakistan is designed to ensure that allocations do not restrict the maximum feasible rate of growth in the province, and to allow concentration on public sector investment which is necessitated by the relative weakness of the private sector.

(b) The reduction in West Pakistan's share of the public sector programme will still permit an increase from Rs. 8,400 million during the Second Plan period to Rs. 16,000 million in the Third—*i.e.*, an increase of nearly 90 per cent.

(c) The allocation to the private sector in East Pakistan represents all that is reasonable to suppose can be utilized, even given all the encouragement and support suggested above. The private sector allocation to West Pakistan, while it represents only about 43 per cent increase compared to the Second Plan, will make it possible to accommodate the additional programme of industrialization contemplated for the Third Plan.

CHAPTER 8

PUBLIC ADMINISTRATION AND PLAN IMPLEMENTATION

The successful formulation and execution of development plans continues to hinge significantly upon the strength and performance of the administrative organization for planning and implementation. The First and the Second Five-Year Plans recommended a number of changes and improvements in the administrative machinery for development. Several of these recommendations, covering institutional and procedural improvements, have been accepted and put into effect during the past few years. In addition, administrative changes of a far-reaching character have been introduced in recent years on the recommendations of the Central and Provincial Administrative Reorganization Committees, the Provincial Administration Commission, and the Standing Organization Committee (1962). Studies made by commissions and committees set up by the Government to review individual fields, such as the Commission on National Education, the Scientific Commission, the Medical Reforms Commission, the Credit Enquiry Commission, have also covered the administrative aspects and problems of the respective fields.

2. As a result of these changes and improvements, the administrative organization for planning and implementation, both at the Centre and in the Provinces, has been strengthened appreciably. The major reforms, reviewed briefly later in this chapter, add up to a picture of substantial progress over a wide front in a relatively short period of time. Deficiencies still remain, however, in a number of areas. These include :

(i) Adaptation to decentralization of developmental functions resulting from the new Constitution ;

(ii) Improving the working of semi-autonomous public corporations and authorities ;

(iii) Strengthening the machinery for preparation of projects, their progressing and evaluation, and for research and statistics ;

(iv) Strengthening the institutions of Basic Democracies for their increased developmental responsibilities ;

(v) Ensuring constant supply of qualified and trained personnel at all levels, in the light of carefully assessed requirements ;

(vi) Modernization of personnel practices and procedures, to secure improved *per capita* performance ;

(vii) Improved coordination between different agencies and levels of Government in planning and implementation of development programmes ;

(viii) Improvement of systems, procedures, and forms in use in Government offices ; codification of rules and regulations, and preparation of organization charts and manuals ; and mechanization of repetitive operations where economically feasible.

I. ORGANIZATION AND PROCEDURES FOR PLANNING

3. The planning machinery in the country has been strengthened and streamlined considerably during the Second Plan period. The National Economic Council, headed by the President, is now the supreme economic body in the country, responsible *inter alia* for the approval of five year plans and for ensuring the balanced development of the entire country. The organization and functions of the Planning Commission at the Centre have been substantially expanded, making the Commission responsible, besides preparation of national plans, for overall progressing and evaluation of development, and preparatory work on foreign aid. With the President as its chairman, the Commission is now able to function much more effectively than before. Its representation on policy-making bodies enables national planning to be related to the monetary, fiscal, credit and other economic policies of the Government. The placement of the Economic Affairs Division under the Deputy Chairman, Planning Commission ensures a closer collaboration between the two agencies in the vital field of foreign aid. Planning cells have been set up in many Central Ministries to assist in the formulation of projects and programmes.

4. In the Provinces also, the position has improved perceptibly. The Planning and Development Departments have been strengthened and placed in charge of Additional Chief Secretaries. In East Pakistan, a Planning Board has been set up to advise on the formulation of Provincial plans and programmes. Bureaux of Statistics have been established in both Provinces as integral part of the Planning and Development Departments. As at the Centre, planning cells have been created in Provincial departments to help proper formulation of projects and programmes.

5. These measures have distinctly improved the organization for planning at the Central and Provincial levels, but there is need for still greater improvement, because of the much heavier tasks of planning now devolving upon provincial administrations. The Provincial Planning and Development Departments need to be expanded, staffed and organized more elaborately. Planning cells need to be created in those departments which still do not have them, and adequately equipped to discharge their important responsibilities. In particular, it is necessary to improve substantially their capacity to produce sound projects and draw up integrated sector programmes.

6. The need for creating and strengthening the machinery for planing at divisional and local levels is also important. The intention of

Government, that the institutions of Basic Democracies play an increasingly important and positive role in the sphere of local development, needs to be translated into concrete action on an urgent basis. To this end, it is necessary to provide these institutions with the required staff and administrative and financial support.

Framework for Economic Policies

7. The improvement of institutional framework for economic policies has been a major factor in the success of the Second Plan. With the changing structure of the economy, economic decisions become more complex and require a more solid factual and analytical basis. Until 1963, the Planning Commission was associated with the formulation and co-ordination of economic policies through representation on the Economic Committee of Cabinet. This Cabinet Committee was abolished early in 1962. It was replaced by a Secretary-level Economic Policy Co-ordination Committee which was also disbanded a few months later. Economic co-ordination is now being effected by the Central Cabinet as a whole. There is, however, need for a compact body, assisted by adequate research staff, for keeping a continuous watch on the economic situation and of relating economic, monetary, and fiscal policies to the objectives of the Plan.

8. Despite the significant shift which has recently occurred from direct to indirect controls, public services in the Central and Provincial Governments continue to shoulder a major responsibility for regulating and stimulating activity in the private sector. This is unavoidable in an economic situation which is changing rapidly, and in a society where many important non-economic objectives have to be reconciled with the basic economic objectives. At the same time however, it is necessary to ensure that the dynamism of the private sector is allowed to make its maximum contribution to the growth of the country. This can be done by allowing the forces of free competition to exercise full pressure for improved quality and reduced costs, by stimulating entrepreneurial ability through a rapid expansion of medium and small-scale enterprises, and by a careful review of existing control and licensing procedures.

II. IMPLEMENTATION IN THE PUBLIC SECTOR

9. Despite the existing policy of maximum reliance on private enterprise, the role of the public sector will expand during the Third Plan period in several key sectors specially in the field of heavy industry. The principal reason for this is to be found in the size of the market that this country has for the products of the principal heavy industries. At present this market is so limited that there is little justification for more than one or two optimum scale plants. There is a dilemma here. If plants in such industries are restricted to the economically optimum number of one or two and are located in the private sector, it would be impossible to avoid a manopolistic or a duopolistic situation. Such a situation in

these strategic areas of the economy is fraught with grave political and social implications. If, on the contrary, for considerations of economic egalitarianism and in disregard of economic criteria, a proliferation of industrial units is permitted, a situation can be created where the industrial complex becomes over-capitalized, inefficient, and incapable of building up any export capability. This also needlessly increases the country's maintenance bill, by denying the exploitation of economies of scale. A large number of our industries are suffering from this malaise. The situation can only be remedied by setting up economically optimum plants in the public sector.

10. The public sector as a whole will be required to implement in the Third Plan a programme much larger than in the Second. This will require substantial strengthening and improvement in the working of the public corporations and departments concerned.

Semi-autonomous Public Agencies

11. In recent years, autonomous public agencies such as the Industrial Development Corporations and the WAPDAs have been used increasingly for implementing development programmes in the public sector. On a tentative estimate, agencies in this category are expected to handle around 55 per cent of the total public sector allocation under the Third Plan. On the whole the implementation of public sector programmes has been accelerated markedly as a result of the operations of these agencies, but their performance has not been uniformly satisfactory. There has also been inadequate appreciation, both within and outside these agencies, of their important role in the process of capital formation and of the need for sound pricing policies and economic efficiency.

12. It is commonly believed that public undertakings as a rule lack the vigour and resourcefulness which is associated with private enterprise; that a business enterprise undertaken by the Government may be subject to too much departmentalism and red tape. The actual operation of certain public enterprises would suggest that this belief is by no means without foundation. It is difficult to see, however, why productive inefficiency should be inherent in public enterprises. If public corporations are in some instances lacking in vigour and initiative, the fault will perhaps very often be found to lie in operational arrangements. It is a commonplace, and like all commonplaces it is apt to be forgotten, that public corporations must be run on business lines, that they should as far as possible be independent of detailed bureaucratic control, and that a way should be found for encouraging and sustaining a competitive spirit in these corporations.

13. It is necessary to make a balanced and careful assessment of the performance of the various autonomous agencies, in order to identify factors prejudicial to their satisfactory operation. Effective measures

should then be taken to remove these factors, to eliminate wasteful expenditures, secure strict public accountability, promote economic efficiency, and to ensure that these agencies play their due role in capital formation. The study in question should include a detailed survey of the internal working of corporations and should be undertaken by the Efficiency and O&M Wing of the Establishment Division, in collaboration with the Planning Commission, the Ministry of Finance, the Provincial Planning and Development and Finance Departments, and the Department Ministry concerned with the corporation's field of activity.

14. Steps are also required to ensure the regular supply of suitable administrative talent to the public corporations and authorities. At present, the manning of these agencies, especially at the higher levels, is done on an *ad hoc* basis. To remedy the situation, consideration should be given to the creation of an Industrial Management Pool, drawn partly from the public services and partly from business and industry. Before adoption, the proposal will have to be studied carefully in the light of experience in India where a Pool has been operating for over six years. Consideration might also be given to the alternatives of creating an Industrial Management Service or strengthening of deputation reserves in some of the Provincial and Central services.

Government Departments

15. In respect of programmes which are directly executed by conventional Government departments such as Agriculture, Education, Health, the need for improvement is also great. Effective steps to evaluate the performance of major developmental departments and to improve their efficiency are necessary to minimize the waste of resources and delays in implementation.

III. PROGRESSING AND EVALUATION OF PROJECTS AND PROGRAMMES

16. The responsibility for progressing and evaluating Provincial projects now rests primarily with the Provincial Governments. The units set up in the Provinces for this purpose are doing useful work but need to be strengthened to be able to deal with the large amount of work involved.

17. The Planning Commission is responsible for evaluating the progress of the five-year plans and of the central projects. It has so far produced three annual evaluation reports of the Second Plan, and in addition, has appraised many completed development projects. This activity needs substantial strengthening in order to provide a better basis for future planning.

18. A prime need is the establishment of an efficient and integrated reporting system under which all essential information about progress on development projects can flow with the minimum time lag from the

field to the highest levels. The progress reports, required to be rendered at present on a quarterly basis, are not submitted regularly; what is more important, they do not provide for a continuous and qualitative assessment of performance. A good reporting system is indispensable for eliminating the waste which such a situation involves. It can also serve as a basis for better project formulation in future. An area needing particular attention in this context is the evaluation of projects after their completion.

19. Effective steps are also needed to co-ordinate the implementation of projects in one sector with allied projects in another sector or sectors. In general, inter-agency consultation and co-ordination does take place when projects are formulated. At the stage of implementation, however, each department tends to concentrate mainly on its own tasks and does not always ensure that its programmes move in step with other related programmes. In the field of irrigation, for example, large projects have been constructed but have failed to yield the expected benefits because plans for colonization have lagged behind. Plans for generation of power have not always been properly co-ordinated with those for power distribution. Close and constant collaboration is required between agencies concerned with different interdependent aspects of projects at all stages.

IV. ADMINISTRATIVE DEVELOPMENT

20. Permanent arrangements are necessary to ensure that the administrative machinery in the country as a whole is kept under continuous review, and improvements in it are carried out with special regard to the requirements of a rapidly expanding development programme. What is needed is a long-term plan of 'administrative development', and the creation of the necessary machinery for it. The need might be met either by expanding the scope of the Standing Organization Committee or by converting and revitalizing the National Administrative Training Council into a National Council for Administrative Development. In either case, the Planning Commission and the Provincial Planning and Development Departments should be closely associated. The important aspects of administrative development are discussed below.

Staffing and Personnel Problems

21. An important deficiency is the all-round shortage of qualified personnel, especially in the Provinces. On the recommendation of the Standing Organization Committee most of the Central staff previously engaged on work which now belongs to the Provinces has been transferred to the latter. Several Central organizations and institutions have also been either bifurcated or transferred completely to the Provinces. This process of strengthening the Provincial administrations should be progressively carried forward under the Third Plan. Early steps should be taken to give effect to those of the accepted recommendations of the Standing Organization Committee which still remain unimplemented. Possibilities of further reduction in the staff of the Central Government should also be studied.

Personnel Administration

22. There is need to modernize and improve personnel policies and practices. The personnel pattern and policies in Government have been the subject of numerous studies in the past, but progress in effecting improvements has been slow. Reform is called for in many directions. For example, in an era of rapid technological progress and change, the technician and the specialist must be given greater recognition *vis-a-vis* the generalist, through improved terms and conditions of service and a more important role in the formulation of policies in his sphere of action. Efforts should also be made, through appropriate measures, to ensure that the general administrator and the professional specialist learn to operate in harmony and in an atmosphere of mutual respect for the larger national objectives.

23. Other deficiencies in the area of personnel administration are inadequate delegation of authority to personnel at intermediate levels, too frequent transfers of officials, lack of adequate rewards for good performance or penalties for failures, and unjustifiably glaring disparities in the service prospects of different classes of the public service. To get the best out of the scarce trained manpower, these deficiencies will have to be dealt with promptly and effectively.

24. An important area requiring streamlining and speeding up is that of recruitment through the Central and Provincial Public Service Commissions. Delays in recruiting persons through these media seriously handicap the administrative agencies concerned. Among measures which could help reducing these delays are enlarging the membership of the Public Service Commissions, and maintenance by them of panels of suitable candidates especially in those fields where the requirements are of a recurring nature.

Employment of Women

25. The country has now reached a stage of development where the question of employment of women in public services should receive greater attention. There has been a perceptible increase in recent years in the number of women who have received general as well as technical education. It is necessary to initiate studies to assess the present employment situation of women and the prospects for increasing their employment, particularly in positions where they can be more efficient and useful than men.

Training in Public Administration

26. Facilities for the training of administrative personnel have been improved considerably during the First and Second Plan periods, through the creation of institutions like the Pakistan Administrative Staff College, the National Institutes of Public Administration, and the Academies for Village Development. Plans should be prepared to increase the

capacities of these institutions, or to set up additional institutions, where necessary, in the light of the estimated requirements of trained administrators and managers for the next five years. It would be advisable to lay down specific targets for this purpose, to be achieved during the Third Plan period. The National Administrative Training Council should devote special attention to this important task. Steps should be taken to make economic planning an integral part of the training curricula at the training institutions. Action is also called for to expand the facilities for education in public administration.

Technical Assistance

27. Technical assistance is available to Pakistan from different sources and in different forms. The impact of the technical assistance programmes has on the whole been favourable, but it is widely felt that this assistance could have been put to better use than has been the case so far. A Committee appointed in 1959 to review technical assistance programmes made a number of recommendations to improve the working of these programmes, including the formulation of an integrated programme of technical training in the light of five year plans, improved selection of candidates, simplification of procedures, and adherence to prescribed procedures by ministries and departments. These recommendations, many of which remain un-implemented so far, should be put into effect. The most important need is for detailed and careful evaluation of technical assistance on a continuing basis. The policy with regard to employment of foreign consultants needs to be carefully studied and suitably modified so as to permit optimum use of this scarce and costly resource. Government has recently appointed a committee to examine this question. The utmost emphasis should be on the maximum utilization of consultants for the training of Pakistanis who can eventually work independently.

Research and Statistics

28. Research is a fundamental component of the planning process. In Pakistan, both the organization and the facilities for research, specially economic and scientific research, leave much to be desired. The Planning Commission is responsible for promoting economic research, but has been unable to do so adequately due to paucity of staff and funds. The Third Plan should witness a determined drive to promote economic and scientific research. The universities should be brought increasingly into the process. Provision should be made for the stimulation and intensification of research in public administration. The need for the setting up of a Public Administration Research Centre should be examined, and steps should be taken to set up a Council for research in social sciences, provision for which was made in the First Plan and repeated in the Second. As recommended in the Second Five-Year Plan (Chapter 6, para. 19), early steps should be taken to create regularly constituted services of economists, statisticians, and scientists.

29. There is need to strengthen the machinery for collection, compilation, and dissemination of statistics, which provide the basis for research and are the backbone of sound planning. Some progress has been made during recent years. The Central Statistical Office (CSO) and the Provincial Bureaux of Statistics have been strengthened. The National Sample Survey Organization, established as part of CSO in 1958, has started providing up-to-date economic statistics, and a National Statistical Council now co-ordinates the policies and programmes of all statistical agencies. A comprehensive three year plan for the development of statistical services, drawn up by the CSO, has recently been approved by the Government, providing *inter alia* for the further strengthening of the CSO, the creation of a training division in it to develop a national programme of statistical training, and the passage of appropriate legislation to provide the needed statutory authority for collection of statistics. The process of consolidation and improvement of the statistical services should be carried forward vigorously during the Third Plan period.

30. It is necessary to launch a programme for codifying and simplifying Government rules and regulations so as to provide a firmer basis for decision-making. There is need also to arrange the preparation and current maintenance of organization charts and manuals of principal units of Government, and a development manual explaining the procedures and methods of preparing, implementing, and evaluating projects.

31. For similar reasons, it is necessary to streamline and simplify the systems, procedures, and forms used in Government departments. A start has already been made under the aegis of the Efficiency and O&M Wing of the Establishment Division. The campaign should be intensified during the Third Plan period. As part of it, consideration should be given to the mechanization of office operations where economically feasible.

Financial Control and Budgeting

32. The vital importance of an efficient budgetary and financial control system to a Government engaged in planned development was strongly emphasized in the First Five-Year Plan. Subsequently, this subject has received increasing and high level attention from Government. On the basis of recommendations made by the Administrative Reorganization Committee, a revised system of financial control and budgeting was introduced in 1960. Under this system, substantial financial powers were delegated to administrative Ministries and Financial Advisers were posted to assist them in discharging their new responsibilities. The system has been revised further recently on the basis of recommendations

CHAPTER 9

AGRICULTURE

I. PROGRESS DURING THE SECOND PLAN

The Second Plan, among other things, aimed at increasing agricultural production and laying a sound foundation for further rapid agricultural development. In order to achieve self-sufficiency in foodgrains at the consumption levels existing during the First Plan period the Second Plan provided for an increase in food-grain production from 13.2 million tons to 15.9 million tons annually by the end of the Second Plan. It also provided for increasing the production of cotton from 1.67 million bales to 2.29 million bales, of sugar-cane from 15.4 million tons to 20.8 million tons, of tea from 54.3 million pounds to 63.8 million pounds.

2. These targets were to be achieved by (i) bringing 2.5 million acres of additional land under cultivation, (ii) providing flood control, reclamation, drainage, and better irrigation facilities to 7 million acres of land, (iii) increasing the distribution of fertilizers in terms of nitrogen, phosphorous and potash from 31 thousand tons in 1959-60 to about 204 thousand tons by 1964-65, (iv) increasing plant protection measures to cover about 15 percent of the area under principal corps, (v) distributing pure seeds of improved varieties of crops to cover about 50 percent of the area under major crops, and (vi) providing extension services on a larger scale to popularise improved agricultural practices among the cultivators.

3. On the basis of programmes so far implemented and those in progress, it is estimated that by 1965, the following targets will be achieved. About 1.6 million acres of new land will be brought under cultivation and about 7.0 million acres of cultivated area will be provided with improved irrigation, drainage and flood protection against the respective targets of 2.5 million acres and 7 million acres. The estimated utilization of fertilizers in terms of nutrients will be about 154 thousand tons in 1965 against the Plan target of 204,000 tons. The plant protection programme is likely to cover an area of about 12 per cent of the total area under major crops against the Plan target of 15 per cent. However given normal weather conditions, targets of food-grain production and those in respect of sugar-cane, gram and pulses, oil-seeds and cotton, are likely to be achieved or even exceeded. Only in jute the production target may not be achieved.

4. Progress in the implementation of programmes designed to strengthen the organizational and institutional frame-work for agriculture has been note worthy. The Agricultural Development Corporations have overcome their initial problems of organization and shortage of qualified staff and would be ready by the end of the Second Plan to undertake

made by an Expert Committee. The Financial Advisers attached to administrative Ministries have been placed under the administrative control of the Ministry of Finance, and their powers have also been enhanced substantially. The financial powers delegated earlier to the administrative Ministries have been partially modified and they have been authorized to exercise these powers without consulting their Financial Advisers. In respect of schemes which have been prepared in detail and included in the Budget, the Ministries have been empowered to issue sanctions of expenditure without having to make any further reference to the Ministry of Finance. During the Third Plan period, the system should be kept under constant reappraisal in order to effect further improvements where necessary.

Accounting System

33. A streamlined system of accounts is essential *inter alia* for the proper and timely evaluation of development plans and programmes. The availability of up-to-date, accurate and meaningfully arranged data regarding government expenditures is also an important pre-requisite for the compilation of national income and social accounts. In most of its essentials, the accounting system now in use has been inherited from the colonial administration of the past, and is patently ill-adapted to present-day requirements. An accounting system under which, for example, final accounts of a fiscal year (and sometimes even of a particular project) are not available till several years later has obviously no place in a dynamic administration geared to rapid economic development. The need for reform in this area is great and urgent.

34. The Administrative Reorganization Committee recommended that expert and detailed investigations of the accounting system should be initiated with a view to bringing about the departmentalization and mechanization of accounts and the introduction of concurrent audit. Considerable preparatory work has since been done in this field and some changes have also been introduced. The re-organization of the accounting system involves far-reaching changes in the classification structure of accounts, the procedures of accounting, and the accounting organization. One of the principal and pressing tasks facing all authorities concerned with financial administration is the formulation and implementation of concrete proposals in regard to these three subjects.

Organization and Management

35. The importance of creating O&M units at the Centre and in the Provinces and staffing them properly was stressed in the First and the Second Plans. The Efficiency and O&M Wing at the Centre is now doing useful work, but the Provincial units need to be strengthened and placed under full-time officers to be able to function effectively. The long-run objective should be to attach O&M officers to individual Ministries and Departments. To make this possible, it will be necessary to train a larger number of O&M officers and to provide them with satisfactory terms of service. The scope of O&M should be broadened from organization and methods to organization and management.

PART II

SECTORAL PROGRAMMES

greater responsibility in implementing agricultural programmes. The extension services have been improved, research and educational facilities greatly expanded and strengthened, land reforms in West Pakistan substantially implemented, and better facilities for credit provided and other courses of action to enable rapid development completed.

II. OBJECTIVES, TARGETS AND STRATEGY FOR THE THIRD PLAN

5. The improved and improving conditions in the agricultural sector show that a measure of success has been achieved and there is justifiable expectation of more rapid development in future years. A stage has now been reached when the course of events in the agricultural sector should be so guided that the progress conforms more firmly than hitherto to long-term objectives. The following would be the major long-term objectives within the frame-work of which agricultural development programmes for the Third Plan should fall :

(a) to increase the real income of farmers ;

(b) to promote by policies and investments those crop and livestock production patterns that will utilize most economically the human, land, and water resources of the country ;

(c) to achieve self-sufficiency in food requirements to the extent compatible with other needs of the economy, aiming, at the same time at improving nutritional standards of food consumption, and at meeting the demand for export crops ;

(d) to promote agricultural development on sound, self-propelling basis by further improvements in agricultural organisations and intensified programmes such as the development of cooperatives, marketing, storage and credit facilities.

6. Industrial development so far has depended primarily on the urban market and with further industrialization the limited urban market is soon sure to be saturated. Thus accelerated industrial growth ultimately will depend in part on increased supplies of agricultural raw materials and on the effective demand for industrial products from the vast rural population who derive their incomes directly from agricultural pursuits. Unless agriculture is developed and the level of real income of the farmers is raised, the demand for industrial products will not increase. This may limit the industrial growth by limiting the market. Prosperity in the industrial sector, therefore, is directly dependent on the prosperity of framers. This gives added urgency to ensuring prosperity in the Agriculture Sector.

7. The real income of farmers will be raised mainly by increasing output on individual farms. As far as possible the free forces of competition in the economy would be allowed to determine the prices of agricultural

produce but price support policies would have to be followed in cases when the price of any particular major agricultural commodity goes down to such an extent as to substantially reduce farm incomes and is likely to affect adversely the production of that crop, and when incentives have to be offered to bring about rapid increase in the production of particular crops, in line with the overall demands of the economy. For example, if the national economy demands higher production of jute *vis-a-vis* rice, the price of jute will have to be so fixed and guaranteed that the farmers, as a result of this incentive, shift over from rice to jute cultivation. There is also good scope for increasing prices received by the farmers through better marketing practices without sacrificing the interest of consumers at large.

8. Because of the backwardness, of the agricultural sector and for popularisation of modern methods, it is necessary to subsidize certain developmental activities. This has been the experience in most of the countries in the early stages of development. In the agricultural programmes of the Third Plan subsidies varying in extent in different cases will continue mainly in plant protection, fertilizer distribution, use of machinery and distribution of improved seeds. Subsidies in fertilizer distribution will be reduced over the years during the Plan period. The Government has so far borne nearly all the costs of plant protection operations. This will not be possible with the enlarged coverage envisaged. As the farmers get used to and convinced of the advantages of plant protection measures, arrangements will be made to recover a part of the cost of operations especially on cash crops and from large-scale cultivators.

9. The main physical targets proposed for the agriculture sector are given in the following table and provide for an increase of 25 percent in foodgrain production ; 35 percent in cotton production and 21 percent in the production of jute.

TABLE 1

Targets of Agricultural Production for the Third Plan.

Crop	Bench mark production			Third Plan target of production			Percentage increase over Bench mark production		
	East Pak.	West Pak.	Total	East Pak.	West Pak.	Total	East Pak.	West Pak	Total
1	2	3	4	5	6	7	8	9	10
				In thousand ton				*percent*	
Rice ..	9,300	1,300	10,600	11,600	1,800	13,400	25	38	26
Wheat ..	30	4,300	4,330	55	5,250	5,305	83	22	23
Minor food-grains.	20	1,275	1,295	29	1,530	1,559	45	20	20
Total Food-grains.	9,350	6,875	16,225	11,684	8,580	20,264	25	25	25

Crop	Bench mark production			Third Plan target of production			Percentage increase over Bench mark production		
	East Pak.	West Pak.	Total	East Pak.	West Pak.	Total	East Pak	West Pak	Total
1	2	3	4	5	6	7	8		10
Sugarcane ..	4,300	16.500	20-800	7,362	20.440	27,802	71	24	34
Gram & pulses	275	750	1,025	430	935	1,365	56	25	35
Oilseeds	136	1,112	1,248	221	1,412	1,633	63	27	31
Fruits and vegetables	2,500	1,600	4,100	3,160	2,100	5,260	27	31	28
In thousand bales									
Jute	6,600	..	6,600	8,000	..	8,000	21	..	21
Cotton	18	2,200	2,218	24	2,976	3,000	33	35	35
In million pounds									
Tea ..	62	..	62	79	—	79	27	..	27
Tobacco ..	65	150	215	92	194	286	42	29	33

10. For achieving these targets of the Third Plan, the strategy would continue to be the best possible use of water in West Pakistan and land in East Pakistan. At the same time efforts will be intensified to further strengthen the organisational and institutional framework for agricultural development which are indispensible for maintaining a regular flow of production requisite and also for influencing the attitude of the farmers towards modern agricultural practices.

11. Recent studies have revealed that past efforts towards rural improvement together with better education and transport facilities have left an impact on the villages : farmers in these areas have begun to develop a more progressive outlook and approach. In the hastening of this process lies the future of Pakistan's agriculture.

12. Of equal importance in the strategy for agricultural development are effective policies and incentives to influence the cropping patterns and resource-use. Financial and other resources including land, water and other " inputs " should be so utilized in the production of different crops that the end result of production efforts is in line with the Plan objectives and potentialities of the country. Without using direct and indirect policies and investment to bring about most beneficial cropping patterns and resource-use, the country will not be able to maximise the total contribution of agriculture to the general economy.

13. The Plan envisages sizeable imports of foodgrains and other agricultural commodities from the United States under PL-480. These imports would supplement domestic production to raise consumption levels and to generate rupee funds for financing Indus Basin Replacement works and the Rural Works Programme. It should be pointed out that these imports will be designed to sub-serve the agricultural development programme and to support a cropping pattern which is in the best interests of the economy. Care will be taken to ensure that these imports do not discourage the production of agricultural goods whose increased production is desirable in the interests of the country. This can be achieved by the pursuit of suitable price policies or by quantitative limitation of imports in respect of the PL-480 commodities.

III. PROGRAMME FOR THE THIRD PLAN

Irrigation and Reclamation.

14. The area under crops at the end of the First Plan and the likely additions by reclamation and improvement by irrigation during the Second and Third Plans are given in table 2 :

TABLE 2

Estimated Area under cultivation and Likely Additions during the Second and Third Plans.

(Million acre)

	East Pakistan	West Pakistan	Total
1. Cropped area at the end of First Plan	25·7	34·2	59·9
2. Additions to cropped area by the end of the Second Plan.	0·5	1·1	1·6
3. Additions to the cropped area during the Third Plan.	1·7	1·4	3·1
4. Total cropped area expected by the end of Third Plan.	27·9	36·7	64·6
5. Existing area estimated to be improved during the Second Plan.	4·0	3·0	7·0
6. Existing area likely to be improved during the Third Plan.	4·0	7·3	11·0

15. In West Pakistan the total area under crops will increase from 34.2 million acres at the end of the First Plan to 35.3 million acres by the end of the Second Plan and to 36.7 million acres by the end of the

Third Plan. The corresponding figures for East Pakistan will be 25.7, 26.2 and 27.9 million acres. It is estimated that 10 to 15 per cent of the target of additional production in major foodgrains and about 25 to 40 per cent of the expected increase in major cash crops will be achieved from additional lands to be brought under cultivation through provision of irrigation facilities and reclamation and improvement of land through the programmes of drainage and flood protecton.

Fertilizer.

16. The use of chemical fertilizer is the most important factor in raising crop yields and increasing the income of farmers. The increasing use of fertilizer will be the spearhead of agricultural development. The actual distribution of fertilizer in 1959-60 and the estimated distribution by the end of the Second and Third Plan periods are given in table 3 below :

TABLE 3

Estimated distribution of Chemical Fertilizer at the end of Each Plan Period.

(Thousand tons)

Year	Nitrogen	Phosphoric Acid	Potash	Total
1959-60	30	1	..	31
1964-65	119	25	10	154
1969-70	318	113	45	476

17. So far mainly nitrogenous fertilizers have been used in the country. The consumption of phosphorous and potash is low. The experiments conducted in both the Provinces have indicated that in many areas appropriate quantities of phosphates used in conjunction with nitrogen yield much better results. The programme proposed for the Third Plan, therefore, provides for increasing the use of phosphorous by about 352 per cent and nitrogen by about 167 per cent and of potash by 350 per cent. In West Pakistan use of gypsum will be encouraged as a soil amending practice for alkaline soils.

18. An important pre-requisite for the success of the fertilizer programme is an adequate distribution system. The arrangements so far have not been satisfactory and have been partly responsible for the slower

rate of increase in fertilizer consumption. Success of this programme will depend greatly on organizing an efficient system of fertilizer distribution among the farmers at reasonable rates.

Plant Protection

19. The area actually covered by plant protection measures at the end of the First Plan and that likely to be covered by the end of the Second and Third Plans are given in Table 4 :

TABLE 4

Estimates of Area Covered or Proposed to be Covered by Plant Protection Operations at the end of each Plan Period.

(Million acres)

	East Pakistan	West Pakistan	Total
Curative measures			
1959-60	0·4	1·4	1·8
1964-65	4·0	3·1	7·1
1969-70	6·0	6·0	12·0
Preventive measures			
1959-60	0·03	2·3	2·3
1964-65	0·3	2·5	2·8
1969-70	10·0	15·0	25·0

20. It is expected that about 12 per cent of the area under major crops will be covered by plant protection measures by the end of the Second Plan period. About 20 per cent of the cropped area is proposed to be covered by the end of the Third Plan. Work on seed treatment against soil and seed borne diseases and other preventive measures have been neglected. These measures are simple and need very little expenditure and can bring large increase in crop production in relation to the cost involved. Therefore, more attention will be given to the preventive measures.

Improved Seed

21. The programme of distribution of improved seeds has suffered for lack of adequate and efficient organization and from paucity of nucleus and foundation seeds which were to be multiplied through registered growers. During the Third Plan the distribution system will be

improved and emphasis will be laid on modernising the existing farms and equipping them to increase the production of nucleus and foundation seeds. Additional seed multiplication farms will be set up in new irrigation project areas and in places where sufficient facilities do not exist for the multiplication of nucleus and foundation seeds. It is expected that as compared with the estimated annual replacement of seed for 6 per cent of the area under principal crops during the year 1964-65, about 17 per cent of the area under major crops will be replaced annually by 1969-70.

Mechanization

22. So far tractors have been used primarily for the reclamation of new lands not efficiently and quickly cultivable by bullock power. General cultivation is carried out with draught animals throughout the country except for isolated cases of large farmers who have adopted tractor cultivation. In West Pakistan tractor operations will be carried out during Third Plan in new project areas, in the Sukkur Barrage Kabuli (privately owned) areas, in areas lying un-cultivated along the rivers and in sailaba cultivation in Quetta and Kalat Divisions the aim being to see that lands do not remain un-cultivated due to lack of facilities for quick levelling and ploughing. The programme will go hand in hand with efforts to increase supplies of irrigation water including installation of tube-wells and digging of open wells.

23. Use of power pumps will be further encouraged and popularised amongst the farmers in East Pakistan. As compared to about 400 thousand acres estimated for 1964-65, about 2 million acres will be brought under winter crops by the end of the Third Plan period through the use of power pumps. Farmers will be encouraged to own power pumps through hire purchase system and operate the pumps themselves. There is great scope in East Pakistan for power tillers, which are suitable for small-size holdings.

24. Maintenance of tractors and tractor implements in good condition is a difficult job. It is proposed to expand the maintenance, repair and training facilities in all those areas where tractor cultivation is introduced. Zonal Workshops will be established for major overhauls and reconditioning of tractor and other equipment. These workshops will stock spare parts and will be responsible for training of tractor operators and mechanics.

25. Improved implements will be popularised both in East and West Pakistan and necessary incentives and facilities will be provided to ensure their adoption by the farmers. More intensive research will be carried out for evolving improved implements and machinery suited to the needs of various areas.

Agricultural extension

26. Because of their importance in disseminating knowledge about improved agricultural practices, extension services will be improved and strengthened at all levels. In East Pakistan agricultural graduates are available for extension work at Sub-Divisional level and above. During the Third Plan period extension centres staffed by Agricultural graduates will be organized at Thana level and more Field Assistants in West Pakistan and Union Assistants in East Pakistan will be posted at Union level. Better transport and other facilities will need to be provided to the extension workers to enable them to perform their task with greater efficiency. In-service training of extension workers especially in plant protection and particularly of those at lower levels will continue. Information and publicity work will be expanded. Agricultural personnel will have to be offered better emoluments and terms of employment to attract better talent to this field.

Agricultural Education.

27. The scheme for establishing agricultural universities in both the provinces which went into operation under the Second Plan, will be completed during the early part of the Third Plan period. Further expansion and improvement will be carried out in these two institutions and also in the existing agricultural colleges at Tejgaon in East Pakistan and at Tando Jam and Peshwar in West Pakistan.

Agricultural Research

28. The scope of research will be expanded and intensified under the research institutes of both the Provinces and also under the Agricultural Research Council to be set up during the Second Plan period into which the Food and Agricultural Council of Pakistan, and the Pakistan Central Cotton and Jute Committees will be amalgamated. Facilities at these research centres and also at their main sub-stations will be expanded and improved. New sub-stations will be opened to cater not only to particular problems and important crops but also to varying conditions and needs of different zones.

Foodgrain Storage

29. By the end of the Second Plan, Government owned storage capacity is likely to be about 1.60 million tons. This capacity will be increased to 2.07 million tons during the Third Plan period. The additional capacity, besides meeting storage needs for reserve stocks, will also facilitate storage of rice meant for export.

Agricultural Marketing

30. It is essential to improve agricultural marketing for ensuring fair prices to the producer as well as consumers. The programme will

include ; (a) establishment of regulated markets and construction of modern market places with necessary storage facilities ; (b) grading of commodities particularly those being exported ; (c) introduction and rapid development of licensed (or certified) warehousing ; (d) gathering of information about market prices in a more scientific manner and from more centres and its quick dissemination to the farmers ; (e) carrying out market surveys of important agricultural crops especially of those having export possibilities ; (f) enforcement of standard weights and measures.

FISHERIES

31. The export of fish has been rising steadily. As a source of additional protein, fish is an important supplement to the country's food resources. The programme to develop marine and inland fisheries will be further expanded during the Third Plan. Fish supply is expected to increase during the Third Plan period by about 35 percent over the estimated production of 350,000 tons in 1964-65.

Development and Conservation :

32. The development programme for inland fisheries for the Third Plan will include reclamation and development of about 100,000 acres of derelict water areas, establishment of fish seed multiplication farms, and development and management of lakes, dams, reservoir, abandoned canals and other impounded waters such as tanks and beels and stocking them with fast growing species of fish.

33. For exploiting marine fisheries, some of the existing boats will be mechanized and at least a thousand new launches and trawlers added to the existing fleet of about 600 vessels. Other necessary facilities and equipment will be provided. The private sector will be encouraged to play an important role in this respect. The Fisheries Development Corporation to be set up shortly in East Pakistan, will assist private and Co-operative enterprises for this development of fisheries.

Marketing, Storage & Transport etc.

34. To check wastage and deterioration of fish, marketing handling, storage and processing facilities will be improved and developed. Fish harbours will be constructed near Chittagong in East Pakistan and on the Mekran Coast in West Pakistan. Transport facilities, landing jetties, cold storage, ice plants and fish markets will be provided at important centres. Fish curing yards will be modernised.

Research and Survey :

35. Facilities both for technological and biological research will be improved and expanded during the Third Plan period. Work on problems such as fish parasites and diseases, introduction of exotic fish, development of by-products such as shark liver oil and fish glue and breeding

of local and foreign varieties will be continued and intensified. While new problems such as taxonomic study of important food fish and study of seasonal variation in demersal and phelagic stock, their habits and migration, will be taken up during the Third Plan, survey and exploration work for assessing the potentialities and locations of fisheries resources both for marine and inland fisheries will be intensified and expanded.

Education and Extension :

36. Facilities at the existing centres for training fisheries personnel and fishermen will be improved and expanded. Extension facilities will be considerably expanded in the country to induce people to take up fish culture in the water areas available with them. Water areas belonging to the community will be developed on an organised basis for fish culture.

ANIMAL HUSBANDRY

37. The importance of livestock to a predominantly agriculture economy of Pakistan cannot be over emphasised. This sub-sector provides all the draught animals to the farmers and milk, meat, eggs and poultry to the population in general. Un-systematic breeding at farm level, poor animal health and shortage of fodder and feed affect the efficiency of livestock. Any programme designed to improve the lievstock wealth of the country must tackle all these problems.

Breeding :

38. For selection and up-grading of local cattle and also for carrying out cross-breeding with improved breeds from West Pakistan three cattle breeding farms will be set up in different zones of East Pakistan. To encourage breeding at the farm level, selected breeders will be given 500 acres of land each on long-term lease on condition that they rear given breeds of cattle and sell a fixed number of quality cows to the department ; during the Third Plan period it is proposed to have two such land grant farms in each division. In milk pocket areas breeding societies will be set up with 50 cows each and these will be supplied with quality bulls and provided with veterinary facilities, record of performances of milk yields will be kept and prizes will be given to the best societies ; it is proposed to have about 80 such societies during the Third Plan period. In view of the shortage of quality bulls, about 15 more artifical insemination centres will be set up on the fringes of bigger towns, haor areas and milk pocket localities. In West Pakistan, besides establishment of one new breeding farm for beef cattle on range management basis and Kundi buffaloes farm in Guddu Barrage area, 50 key villages will be selected for concerted efforts in cattle breeding and improvement ; each of these villages will be supplied with a quality bull and adequate veterinary facilities. In addition, 1,000 more breeding bulls and a larger

number of rams will be distributed and maintained on subsidy. At the same time, 20 more artificial insemination centres will be opened.

39. In order to increase and improve poultry and egg production half a dozen commercial poultry farms will be set-up by the East Pakistan Agricultural Development Corporation. About 100 poultry units for the distribution of quality eggs and chicks will be set up at the Thana level. In West Pakistan besides better management of existing farms and other facilities poultry breeds will be encouraged to have poultry birds and eggs of superior quality.

40. Goat and sheep breeding farms one for each important local breed in East Pakistan and 2 sheep breeding farms (Karakul sheep and Carpet wool sheep) in West Pakistan, will be set up to improve the quality of goats and sheep.

Disease Control :

41. The Plan besides improving the existing veterinary hospitals and dispensaries aims at establishing about 500 new veterinary hospitals and dispensaries in West Pakistan and about 150 is East Pakistan. In order to make the disease control programme more effective at the field level more veterinary Field Assistants in East Pakistan and more Stock Assistants in West Pakistan will be appointed.

Feeds and Fodders :

42. The problem of feed and fodder requirements of livestock has not so far been solved adequately, particularly in East Pakistan where the pressure of population on land is much greater and significant area cannot be diverted to fodder production. Animal nutrition research will continue for evolving suitable methods of producing animal and poultry feed at economic prices. Production of feed on commercial basis will be encouraged. It is expected that with the increase in irrigation facilities and more intensive cultivation the production of fodder crops will also increase. Better range management particularly in West Pakistan will also augment feed supply for livestock.

Research and Education :

43. A Research Institute with laboratory facilities will be set up in East Pakistan near Dacca for research in veterinary sciences, animal nutrition and genetics, and with facilities for manufacturing biological products. In West Pakistan, additional facilities will be provided both at the veterinary Research Institute, Lahore, and at the Livestock Research Institute, Bahadurnagar, and new sub-centres will be opened. Diagnostic laboratories will be set up in all Divisions of both East and West Pakistan.

44. A veterinary Training Institute will be set up in East Pakistan near Dacca where Veterinary Field Assistants will be given training in addition to in-service and re-orientation courses to the staff. Selected hospitals will provide training to vaccinators, compounders and artificial insemination operators. In West Pakistan also training facilities will be expanded and training given to stock assistants. Scholarships will be provided for garduate study within the country and for specialized training abroad.

Other Programmes :

45. Karachi and Islamabad Abattoirs which are in the process of establishment, will be completed during the Third Plan and on the basis of experience gained, similar facilities will be provided in other big cities of both the Provinces in the private or the public sector. Private investors will be encouraged to establish broiler industries in both the Wings. Lahore and Dacca milk plants will be completed during the Third Plan period. New plants will be established on the basis of experience gained.

RANGE MANAGEMENT

46. The programme for the development of range lands during the First and Second Plan periods was conducted on pilot and demonstration bases. During the Third Plan this programme will be carried out on an operational scale with varying intensities and about 10 million acres of land in the Quetta, Kalat, Cholistan, Registan and Tharparkar areas will be covered.

FORESTRY

Extraction and Utilization :

47. To meet the increasing demand for wood, the rate of timber extraction will be accelerated both in East and West Pakistan. During 1969-70, the estimated annual production of timber and poles from the East Pakistan forests will be about 600,000 tons. The main increase will come from the forests of the Chittagong Hill Tracts where the annual extraction programme will be expanded from 4,000 acres to 11,000 acres. In West Pakistan, extraction work will be started in comparatively untouched forest areas like those of the States of Dir, Chitral and Swat. In order to exploit forest resources of the in-accessible areas and to improve forest management in the other areas, existing roads will be improved and about 750 miles of new forest roads will be constructed. Housing facilities for the forestry staff will also be improved. Aerial forest inventory in Northern West Pakistan will be completed while an inventory—survey of the Dacca and Mymensingh forests will be undertaken during the Third Plan.

Afforestation and Regeneration :

48. In East Pakistan, about 125,000 acres of waste lands located mainly in the Chittagong Hill Tracts and the Districts of Chittagong and Sylhet will be afforested while about 55,000 acres of the cut-over area will be regenerated. About 1,200 miles of road-side strips will be planted. Rubber planting over 30,000 acres will be undertaken, in addition to planting for 'bidi' leaves, medicinal plants, oil-palm and other species of economic importance.

49. In West Pakistan, 13,500 miles of canal-side, 4,100 miles of road-side and 500 miles of railway-side strips will be planted, while about 126,000 acres will be brought under irrigated plantations and 100,000 acres of hill and dry areas as well as 100,000 acres of riverine areas will be afforested. Besides, planting of sisal over 2,500 acres and raising of shelter-belts|wind breaks will be undertaken. About 100,000 acres of land in the hill and riverine areas and out of the resumed land under the Land Reform Act will be purchased for afforestation purposes while possibilities of extinguishing community rights in the hill forests by payments of compensation will be explored.

50. Water-shed management survey of West Pakistan covering about 35,000 sq. miles was completed during the Second Plan. During the Third Plan, various works for proper management of the catchment areas of Mangla, Tarbela, Tanda, Rawal, Soan and Pabbi Hills covering an areas of about 600 square miles will be taken up.

Research and Education :

51. Research in silviculture and wood utilization will be intensified. Systematic collection of reliable forestry data, particularly regarding consumption and production of forest products, will be undertaken. All forest areas, whether private or state-owned, need to be classified on the basis of their economic possibilities as "productive" or "protective" forest ; the latter being sub-classified as "timber", firewood and pastures. In order to meet the requirements of technical personnel, the existing training and education facilities will be strengthened.

Soil Conservation

52. In West Pakistan, 15 demonstration areas showing various soil conservation measures and practices will have been opened by the end of the Second Plan period. These measures and practices will be carried out on an operational scale over an area of about 2.5 million acres located in the districts of Gujrat, Jhelum, Rawalpindi, Campbellpur, Hazara, Mianwali and Sargodha.

LAND REFORMS

53. In West Pakistan, land reforms carried out under Martial Law Regulation No. 64, will be completed by the end of the Second Plan period. During the Third Plan, emphasis will be on improving and unifying legislation governing landlord tenant relations and on its strict enforcement. Work concerning consolidation of holdings into economic sizes will be accelerated under the Third Plan. Land revenue assessment rates will be rationalised. The recovery of betterment tax from the owners of land in commanded areas which appreciated in value as a result of irrigation facilities, will be expedited.

54. In East Pakistan, implementation of the comprehensive programme envisaged in the East Bengal State Acquisition and Tenancy Act (of 1950) will be completed during the Third Plan period. This work has been delayed so far because of administrative and other difficulties and will be completed as a result of decisions taken on the recommendation incorporated in the Report of the Land Revenue Administration Enquiry Committee (1962-63), East Pakistan.

AGRICULTURAL CREDIT

55. The three institutional sources from which credit is obtained by farmers are Agricultural Co-operatives, the Agricultural Development Bank of Pakistan and Government Loans (Taccavi). The programme for the development of co-operative credit during the Third Plan period is discussed in Chapter 19. As regards the Agricultural Development Bank of Pakistan, the programme of its expansion has made considerable progress during the Second Plan period. The number of its branches, sub-branches and pay offices was 100 at the end of the year 1962-63 and is likely to increase to about 120 by 1964-65. The programme would be further extended according to needs during the Third Plan. The policy recommended in the Second Plan *viz.*, that the Bank concentrates on long term finance while the co-operative sociaties meet the short and medium-term requirements of the farmers will be effectively implemented. Progressive co-ordination among the activities of these agencies will be effected through the Rural and Co-operative Credit Advisory Committee set up by the Ministry of Finance.

56. Taccavi loans will be given on a restricted scale and will be confined to areas where other institutional credit agencies do not exist or are not likely to be established, or where the special needs of settlement in new areas and land reforms programmes warrant the provision of such loans. Effective recovery measures for taccavi loans will be taken especially in East Pakistan where huge arrears are outstanding for a long time.

Net Financial Allocations in the Agriculture Sector for the Third Plan

(Million Rs.)

Sector	East Pakistan	West Pakistan	CENTRE East Pak.	CENTRE West Pak.	CENTRE Azad Kashmir & Northern Area	Total Centre	East Pakistan (2+4)	West Pakistan (3+5)	Azad Kashmir and Northern Area	All Pakistan (8+9+10)
1	2	3	4	5	6	7	8	9	10	11
PUBLIC SECTOR PROGRAMME										
1. A.D.C. (Surveys and project areas, etc.)	112·13	22·00	..	..	..	..	112·13	22·00	..	134·13
2. Manure & fertilizers	242·10	345·50	242·10	332·70	6·00	580·80	484·20	678·20	6·00	1,168·40
3. Plant protection	262·70	226·00	77·75	65·75	1·50	145·00	340·45	291·75	1·50	633·70
4. Seed multiplication & distribution ..	60·00	47·18	..	..	3·00	3·00	60·00	47·18	3·00	110·18
5. Mechanization	351·00	206·60	..	..	..	..	351·00	206·60	..	557·60
6. Soils	7·00	15·00	3·46	4·44	..	7·90	10·46	19·44	..	29·90
7. Agricultural economics and statistics	7·50	7·00	1·00	1·00	..	2·00	8·50	8·00	..	16·50
8. Agricultural marketing	24·80	26·07	2·50	2·50	..	5·00	27·30	28·57	..	55·87
9. Agricultural extension	49·38	100·85	..	..	3·00	3·00	49.38	100·85	3·00	153·23
10. Agricultural research	30·50	44·00	16·00	8·50	1·50	26·00	46·50	52·50	1·50	100·50
11. Agricultural education	62·10	45·50	..	..	0·50	0·50	62·10	45·50	0·50	108·10
12. Soil conservation	..	120·00	..	..	3·10	3·10	..	120·00	3·10	123·10
13. Foodgrain storage	68·40	20·00	2·50	37·50	..	40·00	70·90	57·50	..	128·40

14. Colonization	..	113·25	..	..	..	..	..	113·25	..	113·25
15. Animal husbandry	112·08	126·74	..	..	3.61	3·61	112·08	126·74	3·61	242·43
16. Range management	..	28·00	..	..	0.10	0·10	..	28·00	0·10	28·10
17. Forestry	163·00	222·00	..	..	12.80	12·80	163·00	222·00	12·80	397·80
18. Fisheries	154·49	103·60	20·15	20·15	0.20	40·50	174·64	123·75	0·20	298·59
19. Land reforms	5·00	12·00	..	..	..	..	5·00	12·00	..	17·00
20. (*a*) Cooperatives	70·00	69·50	..	..	..	..	70·00	69·50	..	139·50
(*b*) Cooperative farming on Comilla basis.	40·00	..	..	..	..	..	40·00	..	..	40·00
Sub-total ..	1,822·18	1,900·79	365·46	472·54	35·31	873·31	2,187·64	2,373·33	35·31	4,596·28*
21. Capital Liability on Government account.—										
(*a*) Cooperatives (Net)	120.00	100·00	..	..	..	..	120·00	100·00	..	220·00
(*b*) Agri credit(Taccavi Net Programme).	80.00	40·00	..	..	1·00	1·00	80·00	40·00	1·00	121·00
(*c*) Share capital contribution to Agricultural Development Bank.	..	..	25·00	25·00	..	50·00	25·00	25·00	..	50·00
GRAND TOTAL ..	2,022·18	2,040·79	390·46	497·54	36·31	924·31	2412·64	2,538·33	36·31	4,987·28

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*As against this allocation, the provision made in outline is Rs. 4.340 million. The matter is under review at present and the necessary adjustment will be made before the plan is finalized.

CHAPTER 10

WATER AND POWER

I. PROGRESS IN THE FIRST AND SECOND PLAN PERIODS

The development of water resources and of power such as electricity and atomic energy along with that of transport and communications constitute the building of the infra-structure so necessary for a developing economy. The effective use of water is required not only for the expansion and improvement of agriculture but also of industry. An expanding programme of electric power generation and distribution is an essential condition of a growing economy. The *per capita* consumption of electricity, for example, may well be regarded as an index of economic advancement.

2. The control and use of water resources for economic development embraces provision of irrigation canals, construction of drainage channels, development of waterways for transport, flood protection works and control of sub-soil water level.

3. Hydro-electric works are an important and a growing source of electric energy. As industrial production grows and becomes more complex, other sources of power such as atomic energy need to be increasingly harnessed.

4. The total cultivated area of the country in 1955 was 58.8 million acres—25 million acres in East Pakistan and 33.8 million acres in West Pakistan. Of this, 22.7 million acres, mostly lying in West Pakistan, were irrigated. By 1960 the irrigated area had increased by 1.1 million acres. Besides about 170,000 acres were partially reclaimed and the water-table depressed in a small area. Over the Second Plan period irrigated area is expected to increase by 1.6 million acres with further rapid increases from the projects completed or about to be completed accruing in the succeeding Plan periods. About 3.5 million acres will be given protection against flood ravages through improved and resuscitated river channels and levee construction and an additional area of 1.5 million, of the ultimate area of 3.4 million acres—all in East Pakistan—will be protected against tidal inundation by a 1,600 miles long coastal embankment, which will also serve as a line of communications. Organisation of flood warning systems should help mitigate misery by timely warning of impending danger. About 2.0 million acres will have been provided effective drainage by the sinking of over 2,000 deep and shallow tube-wells, construction of 350 miles of open drains, improvement and enlargement of additional 150 miles of surface drains and dredging and improvement of over 300 miles of rivers and *khals*.

5. A number of small dams, diversion works and irrigation channels constructed over the decade will contribute to the welfare of the local

population in the Quetta, Kalat and Frontier regions in West Pakistan. Rawalpindi will receive potable water supply from the Rawal storage.

6. Progress in installed generation capacity has been impressive. It nearly tripled between 1955 and 1960 rising from 342 MW in 1955 to 882 MW in 1960. During the Second Plan it was planned to raise the installed capacity to 1,300 MW after accounting for possible retirement of 80 MW but as a result of load surveys, the Second Plan target was raised to about 1,600 MW, assuming no change in the self-generated capacity of industries. It is expected that of this about 1,435 MW will have been put into service by the end of the Plan period and as a result the practice of large-scale shedding of loads will be discontinued. Significantly the percentage contribution of hydro power and generation based on indigenous fuels, which increased from 49 per cent in 1955 to 75 per cent in 1960, is expected further to rise to 87 per cent by 1965. Thus at the end of the Second Plan period only about 13 per cent of the electric energy output is likely to depend upon non-domestic sources of fuel and hold near that level for about 10 years.

7. During the First Plan, the *per capita* electricity generation rose from about 12 units in 1955 to about 22 units in 1960. The Second Plan aimed at generating 50 units *per capita* and electrifying 5,000 villages. But the actual generation is expected to be only 39 units and only 3,000 villages are expected to be electrified. This is because of delayed implementation of some of the distribution schemes.

8. An A.C. Network Analyser Study Centre was established at Lahore to study various design and operation problems of electric power systems all over the country.

9. Both the Provinces organized machinery pools to improve the operational and management efficiency of the construction equipment and workshop facilities. East Pakistan had its dredger fleet improved and enlarged and added shore repair facilities.

10. The Pakistan Atomic Energy Commission established two atomic energy, centres, one at Lahore and the other at Dacca ; two agriculture research centres, one at Dacca and the other at Tandojam ; and three medical radio isotope centres at Karachi, Lahore and Dacca respectively for diagnosis and treatment of malignant diseases. The Institute of Nuclear Science and Technology in Islamabad is expected to start teaching of basic nuclear science and technology in 1965 when installation of a 5 MW swimming pool type research reactor and construction of some of the laboratories will have been completed. Under the programme of training some 500 scientists and engineers, more than 300 will have completed their training. The Commission also pressed forward with a field programme of aero-radiometric survey and exploration of radioactive minerals. A rocket range was established near Karachi under the

sponsorship of the Space and Upper Atmosphere Research Committee to undertake space research.

11. The Survey of Pakistan will have added to its complex an agency to undertake aerial survey. It has already set up a mathematical instruments workshop and started manufacture of various delicate instruments. The meteorological Department will have increased the number of surface meteorological stations and pilot balloon stations from 122 and 22 at the beginning of the Second Plan period to 195 and 33 respectively at the end of the Second Plan period. About 100 rain gauge stations and 20 microclimate observatories will have been added. The major aerodromes will have been equipped with remote-receiving instruments and Karachi, Dacca, Sargodha and Cherat will have weather radars. Electrolyser plants for the production of hydrogen will have been set up in the two Provinces.

12. A number of irrigation schemes will have been completed in Azad Kashmir and Northern areas. Considerable progress is expected to have been made on the Gilgit and Skardu hydro-electric schemes.

13. In financial terms, only a sum of Rs. 1,970 million out of Rs. 2,470 million allocated for the First Plan was spent—a shortfall of about 20 per cent. During the Second Plan the actual expenditure is likely to exceed the Plan allocation of Rs. 4,140 million in the public sector by Rs. 860 million—an over accomplishment of over 20 per cent. Figures of expenditure in the private sector are unascertainable but these are likely to adequately match the Plan provision.

Prospects

14. For expansion and development of agriculture, the main requirements in East Pakistan are flood control and drainage in the summer and irrigation in the winter ; and in West Pakistan, irrigation and control of water-logging and salinity. To ensure that the projects planned to achieve these aims as well as the projects for electric generation and distribution do not result in wasteful and uneconomic effort, systematic and scientific collection of accurate relevant data is necessary.

15. A substantial programme of basic data collection has already been completed. It includes establishment and observation of stage gauge, stream flow and sediment sampling stations, climatological observatories, systematic survey and mapping of streams and potential development area, ground water hydrology, soil surveys and classification, geological invsetigations of some dam sites, exploration for radio-active minerals and power market surveys. Much of the basic information so far collected has been utilized in the preparation of feasibility reports of specific projects of development.

16. The Indus Waters Treaty was signed in September 1960 so that West Pakistan could assess the development potentialities on more dependable basis. A Power Commission was appointed to determine the long range electric power requirements and among other things to make recommendations on sources of generation. Its report is presently under examination. Teams of scientistis and engineers visited the country to investigate the problems of water-logging and salinity in West Pakistan and flood regulation in East Pakistan. Expert advice became available on the feasibility of nuclear power generation in Pakistan. Addition of an Agricultural Development Corporation in each Province to the existing set up of autonomous bodies should help promote early development of land. Over the years, the technical and managerial capacity of the executing organisations has also improved considerably. All these activities have prepared the ground for the development of the water and power resources of the country at an accelerated pace.

II. THIRD PLAN PROGRAMME

17. *Physical Targets.*—The increases expected during the Third Plan period as a result of schemes executed or to be implemented during 1965-70 are as follows :

Water		
Irrigated area		.. 3.6 million acres
Improved area		.. 11.0 ,, ,,
(i) By drainage	.. 6.0	
(ii) By flood protection	4.0	
(iii) By others improvements	.. 1.0	
Tubewells drilled and developed		.. 8,000
Drain mileage constructed		.. 2,500
Bunds raised and strengtened		.. 1,500 miles
Power		
Power capacity installed (net)		.. 1,365 MW
Transmission lines strung		.. 9,000 circuit miles
Villages electrified		.. 8,000
Railway mileage electrified		.. 177.2 miles

18. *Investment.*—Schemes of water and power take long time to mature. Investments have, therefore, to be made early to reap the benefits later, even in subsequent Plan periods. Physical achievements

and financial outlays, therefore, must be looked at from this angle. The Third Plan provides for an investment of Rs. 8,930 million—Rs. 8,630 million in the public sector and Rs. 300 million in the private sector. Table I, at the end of this chapter, shows the breakdown of the proposed allocation between various sub-sectors. The anticipated investment in the private sector is likely to be devoted to water-courses, private tubewells and percolation wells, internal house wiring and some Rs. 100 million on additional generation and transmission by the Karachi Electric Supply Corporation.

Overall Programme

The overall programme of development during the Third Plan period is as follows :

19. *Investigations, Surveys and Research.*—The allocation to the programme of investigations, surveys and experimentation will permit the two Provinces to continue to collect, compile and evaluate data relating to topography, soils, surface and ground water hydrology, and electric power requirements to provide a sound basis for the development of feasible projects of land and water conservation, flood control and generation and distribution of electric power. Concurrently the Provinces will be able to retain the services of general consultants and engineering firms for preparation and appraisal of engineering reports and a master plan for the unified development of water and power resources of each Province. It will also permit exploring the feasibility of exploitation of energy in wind in areas where a more suitable electricty producing energy source is not available. A sum of Rs. 371 million is provided.

20. *Multipurpose Development.*—Multipurpose projects aim at relieving drainage congestion, providing regulated supplies for irrigation, protecting land against flood damage, improving navigation and possibly developing electric power. A sum of Rs. 1,493 million has been provided to complete ongoing schemes and an additional amount of Rs. 643 million is intended to cover the expenditure to be incurred on such new schemes as the Jessore unit of the Ganges-Kobadak scheme, Sangu multipurpose project, Gaj river dam, Talli Tangi dam, Bahar Kach dam and a number of small storages in West Pakistan to be executed by the Agriculture Development Corporation of West Pakistan.

21. *Irrigation.*—There is widespread agreement that in arid and semiarid areas no other single factor can increase farm production so much as the provision of adequate irrigation. West Pakistan has the world's largest single system of irrigation but it is plagued by many problems resulting in some of the lowest yields in the world. Past arable areas have no irrigation facility at all. Absence of irrigation

facility at all. Absence of irrigation over vast areas in East Pakistan is the most critical problem of inadequacy of food and underemployment. The Plan, therefore, not only provides for the progress and possible completion of ongoing schemes but also makes provision for a number of new schemes, both small and large. It further provides for revamping of some canals to provide more efficient irrigation service. Altogether a sum of Rs. 120 million has been provided for the completion of ongoing schemes and Rs. 760 million for new schemes in their various stages of progress.

22. *Drainage, Reclamation and Tubewells.*—A concerted attack on the interrelated complex of the enduring problems of waterlogging, salinity and lower land productivity in West Pakistan was begun in the Second Plan. A sum of Rs. 1,152 million has been provided to ensure continuity of the programme.

23. *Flood Regulation.*—Gradual elimination of flood risk through preventive and protective measures has been aimed at in programming for the successive Plans. Provision has been made to complete the 3,000 miles long coastal embankment in East Pakistan, a levee on the left bank of the Brahamputra and some small schemes in West Pakistan. A sum of Rs. 356 million has been provided, almost in the ratio of 1 to 1 for ongoing and new schemes respectively.

24. *Open Canals.*—A sum of Rs. 100 million has been provided for extension, improvement and replacement of irrigation works.

25. *Machinery Pools and Dredger Fleet.*—The dredger fleet in East Pakistan will be further improved and augmented and the machinery pools in the two Provinces will be strengthened. A sum of Rs. 100 million has been provided.

26. *Electric Power.*—The electric power programme aims at completion of ongoing schemes of generation and transmission ; extension of some of the existing power utilities to meet the Plan period needs ; diversification of generation by introducing nuclear power generation ; introduction of new power systems to make electric power more widely available ; expansion and improvement of transmission and distribution networks ; electrification of a large number of villages to strengthen rural economy ; introduction of electric traction in railways ; and provision of aids for better control and utilization of the available facilities. The total energy generated will amount to 9.8 billion units giving a *per capita* consumption of 78 units. A sum of Rs. 3,055 million excluding the anticipated outlays on nuclear power generation, railway electrification and semi-public sector has been provided.

27. *Atomic Power.*—The Pakistan Atomic Energy Commission will be able to complete the Institute of Nuclear Science and Technology, increase the number of agriculture isotope centres by four and the medical

centres by eight. It will further enter the commercial field of generation of electricity through fissionable materials by the completion of a 70 MW nuclear power station at Rooppur in East Pakistan and one of 132 MW in the metropolis of Karachi in West Pakistan. This diversification in electric generation capacity will ease upward pressure on the limited known gas reserves of the country for production of electricity and conserve these for manufacture of fertilizers, petro-chemicals and filling other needs. In East Pakistan with limited hydro potential and in West Pakistan the hydro sites being located far to the north, nuclear power could even yield future cost advantages.

28. *Meteorological Service.*—The Meteorological Department will be able to improve meteorological tele-communication service, weather forecasting and weather warning services and network of meteorological and geophysical observatories. A sum of Rs. 35 million has been provided.

29. *Survey of Pakistan.*—The Survey of Pakistan will be able to strengthen the aerial survey unit, set up a Length Standardisation Laboratory, create units for forest and town surveys and establish two Letter Presses, and an Astronomical Observatory. A provision of Rs. 12 million has been made.

East Pakistan Programme

30. Priority will be given to the speedy completion of all ongoing projects. A large number of schemes are in progress, some from the First Plan period. These include the Teesta Barrage, Ganges-Kobadak (Kushtia Unit), the Old Brahmaputra Project (first phase), Southern Rajshahi scheme, Coastal Embankments, Karnaphuli third unit, Sidhirganj Power Station extension and Sidhirganj-Jhenida inter-connector.

31. It is important to maintain a substantial programme of surveys, investigations and studies. A sum of Rs. 103 million is provided for this programme over and above Rs. 67 million needed for completing the ongoing programme, and includes a sum of Rs. 45 million for consultants.

32. East Pakistan appears to be in a position to embark upon some major works of weir-controlled irrigation and flood regulation including channel improvements and levy construction. It seems desirable to shift the amphasis to gravity fed schemes and a sum of about Rs. 300 million has been provided for the construction of a barrage on the Ganges, which will also contribute towards flood protection, improvement of navigation and drainage. The present programme of strategically located pumping schemes, should however, continue. A sum of Rs. 160 million is allocated for the purpose. The feasibility studies for

Sangu multipurpose project are encouraging and a sum of Rs. 230 million has been provided for implementation of the emerging scheme. A provision of Rs. 70 million has also been made for the augmentation and improvement of the dredger fleet and machinery pool.

33. In view of the expanded industrial and agriculture programmes, the available generating capacity in East Pakistan will be raised from about 301 MW expected to be placed in service by the end of the Second Plan period to about 800 MW by the end of the Third Plan period; after allowing for retirement of 30 MW of captive industrial capacity. Transmission and distribution mileage will increase from an estimated 2,700 miles to 4,400 miles by the end of the Third Plan period. Some 4,000 villages are proposed to be electrified during the Plan period at a cost of Rs. 200 million. An additional provision of Rs. 160 million has been made for internal wiring and equipment. It is expected that the *per capita* generation of electricity in East Pakistan will nearly triple, from 13 units at the end of the Second Plan period to 35 units by 1970.

West Pakistan Programme

34. A sum of Rs. 1,327 million has been provided for the completion of the ongoing schemes of irrigation, flood control, etc., in West Pakistan of which 686 million, is proposed to be spent on drainage and reclamation schemes, namely Chaj Doab, Lower Thal, Upper Rechna, Gaja, Larkana-Shikarpur and Khairpur. It is expected that these schemes will provide adequate drainage and possibly additional water for leaching of salts to 5 million acres—4 million acres in the Northern Zone and 1 million acres in the Southern Zone, including new areas. A further sum of Rs. 466 million has been provided to similar schemes to cover an area of approximately 3.5 million acres—1 million acres in the Northern Zone and 2.5 million acres in the Southern Zone. Of this about 1 million acres will be adequately drained during the Plan period.

35. The capacity of Thal Canal, Upper Chenab Canal, Lower Jhelum canal and a number of branches in the Northern Zone will be increased suitably. The Sukkur Barrage Canals also need to be revamped to raise the irrigation intensity to the level of similar older projects. Mostly by using unregulated river flows running to sea. The most economic solution seems to lie in transferring part of the command to a new barrage, say at Sehwan. The Plan makes provision for investigations, studies and initiation of work on the project.

36. A number of independent irrigation schemes based on conservation and regulation of flood waters through storage are proposed for construction in the Frontier, Baluchistan and Karachi regions. Construction of a dam will also start across the Gaj river to resuscitate the Manchar Lake as a fishing, game, recreation and tourists centre and to expand irrigated acreage. A large number of small irrigation and flood regulation schemes mostly to benefit the Frontier Region has been provided for.

37. West Pakistan presently has some five self-sufficient power systems—the Northern Grid Zone, Quetta system, Sukkur system, Hyderabad system and Karachi system. Presently there seems no justification for merging all these systems. An additional system is proposed to be located at Dadu with an installed capacity of 132 MW and suitable transmission and distribution network. The total capacity serving the grid zone will increase from 704 MW at the end of the Second Plan period including 100 MW of captive industrial capacity to 1193 MW by the end of the Third Plan period, including the Mangla scheduled for completion by 1968. Further provisions have been made to add one unit of 7.5 MW to Quetta Power Station and a nuclear power station of 132 MW besides 66 MW C station extension to serve Karachi and its suburbs. Thus the total generating capacity available in West Pakistan at the end of the Third Plan period will amount to 2000 MW, after allowing for retirement of 30 MW of captive industrial capacity.

38. Some 3,000 villages are expected to have electricity service by the end of the Second Plan period. Electrification of an additional 4,000 villages at a cost of Rs. 500 million in the public sector and about Rs. 70 million in the private sector has been provided for. The Lahore-Khanewal section of the Pakistan Western Railways will switch over to electric traction for which provision has been made in the Transport and Communications Sector.

39. It is expected that the *per capita* generation in West Pakistan will be around 133 units by 1970 as against an anticipated *per capita* generation of 71 units by 1965.

Central Programme

40. The programme to be executed by the Centre covers mainly the activities of the Pakistan Atomic Energy Commission and the Ministry of Kashmir Affairs and provisions for the Department of Meteorology and the Survey of Pakistan.

41. The Atomic Energy Commission of Pakistan will install a nuclear power station of 70 MW in the Western Zone of East Pakistan and of 132 MW to serve Karachi and its suburbs. The number of agriculture isotope centres will be increased by four and of the medical centres by eight. Altogether a sum of Rs. 403 million is allocated. The allocation to the Ministry of Kashmir Affairs, Department of Meteorology and Survey of Pakistan will be Rs. 30 million, Rs. 35 million and Rs. 12 million respectively.

TABLE I

Programme of Net Expenditure on Water and Power Development

(Million Rs.)

Sub-Sector	EAST PAKISTAN			WEST PAKISTAN			TOTAL		
	Ongoing	New	Total	Ongoing	New	Total	Ongoing	New	Total
1	2	3	4	5	6	7	8	9	10
				PUBLIC SECTOR					
Investigations and surveys	67	103	170	01	200	201	68	303	371
Multipurpose development	1,239	463	1,702	254	180	434	1,493	643	2,136
Irrigation	61	160	22·1	59	600	659	120	760	880
Drainage, reclamation and tubewells	..	..	..	686	466	1,152	686	466	1,152
Flood regulation	182	50	23·2	..	124	124	182	174	156
Open canals	..	..	..	..	100	100	..	100	100
Miscellaneous	..	70	7·0	..	30	30	..	100	100
Power	13,5	1,220	1,355	327	1,373	1,700	462	2,593	3,055
Sub-Total	1,684	2,066	3,750	1,327	307,3	4,400	3,011	5,139	8,150

Centre's Programme	..	120	120	..	360	360	..	480	80
Total Public Sector ..	1,684	2,186	3,870	1,327	3,473	4,760	3,011	5,619	8,630
PRIVATE SECTOR									
Irrigation, drainage etc.	..	50	50	..	80	80	..	130	130
Power	..	..	..	..	170	170	..	170	170
Sub-Total ..	..	50	50	..	250	250	..	300	300
Grand Total ..	1,684	2,236	3,920	1,327	3,683	5,010	3,011	5,919	8,930

CHAPTER 11

INDUSTRY

The growth and diversification of the industry in Pakistan has been remarkably rapid. At the time of Independence, Pakistan had virtually no industry. In 1949-50, two years after Independence, the contribution of the manufacturing sector to the Gross National Product was only 7 per cent, mostly from small industries. The contribution of large-scale industries to the G.N.P. was only 1.5 per cent. Over the past 15 years, large scale industry has been growing at an average rate of almost 15 per cent per year and by 1964-65, the contribution of large scale industry is expected to increase to 7.4 per cent and of the manufacturing sector as a whole to 12.8 per cent of the G.N.P. In absolute terms the contribution of industry to G.N.P. (in 1959-60 prices) will almost treble, from Rs. 1,740 million in 1949-50 to Rs. 5,100 million in 1964-65.

2. As a result of this impressive rate of growth in Industry there has been a significant increase in the production of all major consumer goods and some capital goods. The production of cotton textiles, for example, has increased from 90 million yards in 1948-49 to 730 million yards by 1963-64, of jute manufactures from almost nil to 300 thousand tons, of cement from 330 thousand tons to 1,475 thousand tons, of white sugar from 30 thousand tons to 271 thousand tons, of vegetable oils from 60 thousand to 200 thousand tons and of cigarettes from 240 million to 16,000 million. At the time of Independence, Pakistan had no facilities for the domestic production of fertilizers, paper, newsprint, wires and cables, steel or any other heavy industries. A beginning has been made in all these fields during the Second Plan period. By the middle of 1965 fertilizer production is expected to be 550 thousand tons, which will meet almost 55 per cent of the requirements of nitrogen fertilizers. An anticipated production of 30,000 tons of paper will meet almost the entire demand for writing paper, while the newsprint and mechanical paper production of 56,000 tons will leave a surplus of at least 10,000 tons for export. The domestic production of certain chemicals such as Soda Ash, Caustic Soda, and Sulphuric Acid has started and the first steel plant with a total ingot capacity of 150 thousand tons is expected to go into production at Chittagong during 1965-66. The construction of another larger steel mill at Karachi with a capacity of 450,000 tons is also expected to commence before the end of the Second Plan period. Plans for the production of heavy engineering equipment, electrical equipment, machine tools and petro-chemicals in both the Provinces are in an advanced stage of finalisation and implementation will be taken up on a substantial scale during the Third Plan period.

3. In financial terms, the Second Plan had allocated Rs. 5,120 million or 22 per cent of the total Plan outlay to industries, Rs. 1,460 million, in Public Sector and Rs. 3,660 million in the Private Sector.

Actual estimated investment is expected to be Rs. 1,496 million in the Public Sector and about Rs. 4,304 million in the Private Sector. The industry group-wise breakdown of the total industrial allocations during the Second Plan is shown in the following table :

TABLE 1

Industry Group-wise breakdown of total allocation during the Second Plan

(Million Rs.)

	Private investment	Public investment	Total investment
Consumer goods industry :			
1. Textile including Jute	725	150	875
2. Food Processing Industry including sugar	362	69	431
3. Pulp, paper & paper products	25	47	72
4. Tobacco manufactures	23	—	23
5. Leather and leather goods	29	—	29
Capital goods industry :			
6. Basic metal including Iron and steel	206	210	416
7. Fertilizers and chemicals	208	422	630
8. Non-metallic incl. Cement	274	40	413
9. Machinery	102	7	109
10. Electrical machinery	71	—	71

I. THIRD PLAN PROGRAMMES AND POLICIES

Financial Allocation

4. The Third Plan calls for a decisive intensification of the process of industrialization and allocates Rs. 13,050 million or 25 per cent of the total resources to the Sector which will be 241 per cent larger than the estimated actual industrial investment of about 5,800 million during the Second Plan. The break-down of the proposed investment between the Public and Private Sectors and between the two Provinces together with the corresponding figures for the Second Plan is shown in the following table.

TABLE 2

Breakdown of allocation for the industries Sector during the Third Plan

(Million Rs.)

	Second Plan Estimated Investment.			Proposed Third Plan allocation		
	Public	Private	Total	Public	Private	Total
East Pakistan	997·4	1443·2	2440·6	3,000	3,800	6,800
West Pakistan	417·8	2860·8	3278·6	1,450	4,500	5,950
Centre	80·8	@	80·8	300	—	300
Total	1496·0	4304·0	5800·0	4,750	8,300	13,050

@ Figures for Karachi included in West Pakistan.

5. The most significant feature of the proposed allocations is the sharp acceleration in East Pakistan's programme for industrialization. The proposed allocation is 295 per cent larger than the estimated actual investment during the Second Plan and also exceeds the allocation for West Pakistan.

Main Objectives

6. The major objective of the industrial programme during the Third Five-Year Plan will be to shift the emphasis from consumer goods industry to the establishment of basic capital and producer goods industries to reduce the country's dependence on foreign assistance for the import of capital goods. The industries will include steel, heavy machinery including agricultural and electrical machinery, transport equipment and heavy chemicals.

7. Another important objective will be to develop additional capacity for export in all those fields where the country has natural or acquired advantages, instead of confining the effort to import substitution. Industries which have a sizeable export potential including fertilizers, petro-chemicals, pumps, cement, sugar, paper and newsprint, leather goods and fruit processing besides the traditional manufactures such as cotton and jute textiles, will be specially encouraged.

8. In the fields of consumer goods industry, the aim will be to meet all essential needs, but restrain consumption of non-essential or luxury goods. Relative priorities will be so determined as to secure the maximum feasible increase in national income and additional employment opportunities outside agriculture. Existing industries will be provided all possible facilities such as equipment for balancing and modernization, spare parts, and raw material to maximize their production.

9. It is expected that as a result of the Third Plan programmes, the share of industry in national income will increase from about 13 per cent in 1964-65 to 14.5 per cent in 1969-70 and the portion of manufactured exports in total foreign exchange earnings will go up from about 30 per cent in 1964-65 to 45 per cent in 1969-70.

Physical Targets

10. The following table sets out the physical targets for some of the principal goods to be produced by 1969-70. It is important to recognize that these are tentative targets and can be adjusted in response to changes in prices, internal or external demand and the availability of local and foreign capital.

TABLE 3

Tentative Physical Targets for Principal Industries

Industry	Unit	2nd Plan Targets	3rd Plan Targets
Food Manufacturing :			
White sugar	Tons	5,00,000	6,40,000
Edible vegetable oils	Tons	2,50,000	3,00,000
Cigarettes	Million	20,000	30,000
Textiles :			
Cotton yarn	Million lbs.	520	620
Jute manufactures	Thousand tons	380	720
Paper and Boards :			
Writing and printing papers	Thousand tons	30	100
Board	Thousand tons	25	70
Newsprint & mechanical paper ..	Thousand tons	51	70
Chemical Industries :			
Nitrogenous fertilizers (in terms of ammonium sulphate)	Thousand tons	550	2,500
Phosphatic Fertilizers (in terms of triple superphosphate)	Thousand tons	7	550
Soda ash	Thousand tons	74	150
Cuastic soda	Thousand tons	35	75
Sulphuric acid	Thousand tons	65	400
Petro-chemicals	Thousand tons	—	300
Non-Metallic Minerals:			
Cement	Thousand tons	3,000	5,000
Basic Metal :			
Steel	Thousand Ingot tons	550	1,200
Electrical Machinery :			
Wires and cables	Thousandtons	20	35
Machinery :			
Machine tool	Million rupees	—	100
Heavy machinery (Complex)	Million rupees	Nil.	400

Rationale of Physical Targets

12. (a) *White Sugar.*—The Second Plan target for white sugar production has recently been raised from 3 to 5 lakh tons. The increase in population during the Third Plan combined with the change in dietary

habits would create an additional demand for sugar. The production target of 640,000 tons proposed for 1970 may leave some surplus for export.

(b) *Tea.*—The internal demand for tea by 1970 is expected to be around 65 million lbs. If the proposed target of 79 million lbs. for tea production is achieved, there may be an exportable surplus of 14 million lbs.

(c) *Cigarettes.*—The estimated internal demand for cigarettes by 1970 is 30,000 million cigarettes and it is proposed to meet that demand.

(d) *Cotton Textiles.*—Expansion of cotton textiles is proposed to raise the *per capita* consumption from the present 14.0 yds. to 15.5 yds. by 1970, leaving an exportable surplus of 250 million yards of cloth and about 100 million lbs. of yarn.

(e) *Jute goods.*—Manufactured jute is the most important export of Pakistan and it is intended to raise the production of jute goods from the projected level of 380,000 tons by 1965 to 720,000 tons by 1970 including 120,000 from broad looms. The internal demand for jute goods by 1970 expected to be 120,000 tons leaving an exportable surplus of 600,000 tons by 1970.

(f) *Paper Board and Newsprint.*—The demand for these commodities will rapidly increase as a result of programmes in the plan to increase literacy and to promote industries. The targets are based on these demands, besides leaving about 35,000 tons of paper and 25,000 tons of newsprint for export.

(g) *Fertilizers.*—Increased domestic production of chemical fertilizer is a key factor in achieving the crucial national objective of increasing agricultural producton. High priority will, therefore, be accorded to the indigenous production of nitrogenous and phosphatic fertilizers to suit different types of soils in the country.

(h) *Soda Ash and Caustic Soda.*—Growth of glass, soap and textile industries are dependent on the development of this industry.

(i) *Sulphuric Acid.*—Petroleum refining, rayon, industrial explosives, steel pickling, superphosphate and ammonia sulphate industries are consumer industries of sulphuric acid and, therefore, the increase in the production of sulphuric acid on a substantial scale is essential.

(j) *Petrochemicals.*—Petrochemicals have been integrated into the economics of all the developed countries by virtue of their unique properties, flexibility in application, and low cost. Pakistan is not currently a major user of petrochemicals, but possesses large reserves of natural gas, one of the primary raw materials, and has access to the by-products of a growing petroleum refining industry in the country. The ability of Pakistan manufacturers to utilise the proposed output of petrochemicals will be limited only by their skill and ingenuity in applying these to new uses, substituting for present imported materials, and developing a knowledge of the market in Pakistan, and establishing secondary and tertiary industries for processing the multitude of products to be produced.

(k) *Cement.*—Cement ranks next to steel as a development commodity and demand for cement is rising rapidly. The proposed target of 5 million tons production by 1970 may prove modest and may have to be reconsidered by 1966-67 in the light of further studies.

(l) *Steel (Ingot).*—The capacity proposed to be developed by 1970 is 1.2 million tons is based on the development programme envisaged under the Third Plan.

(m) *Wires and Cables.*—The power distribution programme and telephone facilities envisaged under the Third Plan and the capacity proposed by 1970 may result in a greater demand than the production proposed.

(n) *Machine Tools and Heavy Industries Complex.*—Development of heavy engineering (mechanical and electrical) industries envisaged in the programme aims at the local manufacture of parts of plants for fertilizer, cement, paper and textile industries besides motors, transformers, generators, tractors, trailers, coaches and wagons, locomotives, stationary and marine diesel engines. These investment goods will help to reduce the foreign exchange cost of programmes in the Water & Power, Agriculture and Transport and Communication Sectors during the Third Plan period. The development of basic chemical and engineering industry is an essential pre-requisite for self-sustaining industrial growth.

Industrial Policy

13. The success of the industrial programmes and in the long run of the development effort itself depends a great deal on sound economic policies. Some of these policies, such as the choice between the public and the private sector or fiscal policies designed to reduce the concentration of economic power have to be formulated in the light of the overall political and social objective of the Plan.

14. In a period of rapid economic growth in which private enterprise has a major role to play, some concentration of economic power and wealth is unavoidable because the process of capital formation depends mainly on corporate profits and it is easier for well established firms to expand their size and enter new fields of enterprise. Such firms enjoy greater advantages of organisation and have easier access to the capital market and other facilities than new or smaller units. But the growth of large firms or industrial groups is useful only upto

a certain point. Carried too far it can expose the social and political structure to new strains and tensions which may in the long run adversely affect the entire development effort. This problem is clearly recognized by the consitution which lays down as a principle of policy that "the well being of the people should be secured among other things by preventing the undue concentration of wealth and means of production and distribution in the hands of a few, to the detriment of the interest of the common man". (Principle 9).

15. During the Second Plan period, some measures have been adopted to move towards the objectives laid down in the constitution, such as the extension of the role of the public sector in strategic areas of the economy, widening opportunities for small and medium sized units and a steeply progressive income tax. The policy of preventing concentration of wealth and economic power in the hands of a few will be pursued with greater vigour during the Third Plan.

16. Barring any specific constraints that may be necessary in the context of the problem referred to above, the Third Plan will continue to rely heavily on private enterprise for achieving its investment and industrial targets. The size of the public sector allocation for industries is proportionately larger than in the Second Plan, *viz.*, 33 per cent of the total compared to 25 per cent in the Second Plan, but this is primarily due to the need for accelerating the pace of industrialization in East Pakistan where private capital or initiative is not adequate.

17. Private foreign investment will also continue to be welcome in industries which require advanced technology and new skills. Foreign investors will be encouraged to associate local capital and to undertake the training of Pakistanis employed by them.

Relative Importance of Large and Small Scale Industries

18. Consideration will be given in the Plan to the choice between large, medium and small units. The assumptions of the Plan are that new small and medium sized industries will be encouraged; that subcontracting, which implies that some large scale industries will buy systematically from smaller units, will be fostered; that small industries with prospects of advantageous development will be assisted, but that the aim will be not to perpetuate an uneconomic structure.

19. The Plan envisages a considerable expansion of the advisory and commercial services provided by the Government under aegis of Small Industries Corporation in each Province. A net work of small industries service centres will be set up all over the country, supplemented by extension services, including mobile extension units, to give

technical and management advice. Where necessary, production facilities will be organized, for example common facility centres, or small industries estates provided with transport, water, power and other facilities. Similarly a net-work of supply and marketing services will be set up, and credit services organized in co-operation with the banks.

Location of industries

20. It would be of advantage to adopt a policy of industrial location which will encourage the growth of a number of regional industrial complexes. Close co-operation and co-ordination will be necessary between authorities responsible for industrial planning and those dealing with urban and regional physical planning in order to achieve this objective.

Location of Industries

21. Promotion of Science and Technology is essential for the effective utilization of the natural and human resources of the country. The Council of Scientific and Industrial Research has already made a beginning in this respect by finding and propagating new processes for the production of goods based on indigenous materials. Some of these, like water proofing material from jute, water proofing additive for cement, light weight concrete, vitamin-A concentrate from shark liver, dry distemper, printing ink, insulation board from bagasse, chipboard from wood waste and synthetic marble are already in economical use. The Third Plan provides Rs. 150 million for continuance of the on-going and new research activities. The emphasis in the Council's Programme will be mainly on applied research directed towards the development of new products, processes and techniques for the most economic use of raw material resources.

CHAPTER 12

FUELS AND MINERALS

Fuel is one of the basic needs for development and maintenance of the economy. Projections of primary energy requirements as estimated in 1961 on a conservative basis show that if 1,0625 million KWH are supplied as hydel electricity towards meeting the requirements other fuels required to meet the overall needs would be :

Coal	48,00,000 tons.
Natural Gas	1,54,945 million c.ft.
Petroleum	30,298 thousand barrels.

2. While the need for continuing the search for oil is apparent, these projections indicate the imperative need for an all out effort to develop the coal and gas resources if the import bill for fuels is not to negate the advantages gained by setting up refineries based on imported crude oil. At the same time acceleration of geological investigations and intensifications of drilling to determine the nature and extent of deposits is necessary. These investigations and drilling operations would constitute directly to the determination and exploitation of mineral resources not only for meeting the internal requirements of primary energy and providing minerals for processing within the country but also for opening up new possibilities for the export of minerals and mineral products.

I. PROGRESS DURING FIRST AND SECOND PLANS

3. Investment of Rs. 530 million of which Rs. 170 million was spent in the Public Sector was made during the First Five Year Plan in the fuels and minerals sector which accelerated the increase in production in the following selected minerals :—

Minerals	Unit	1955	1960
1. Coal	Thousand tons ..	533	818
2. Gypsum	Do. ..	28	90
3. Lime stone	Do. ..	886	1,064
4. Crude petroleum	Million Imp. Gallon	72	92

4. The Second Plan allocated a sum of Rs. 1,000 million for fuels and minerals Rs, 450 million in the Public and Rs. 550 million in the private sector. This investment envisaged *inter alia* an increase in the production of coal from 723,000 tons in 1959-60 to 1,500,000 tons in 1964-65 and of gas from 22,500 million cu. ft. in 1959 to over 100,000 million c. ft. in 1965. Delays in the work on gas transmission pipelines being taken in hand and some slowng down of private investment in oil prospecting will result in a shortfall of Rs. 250 million to Rs. 300 million.

5. The Geological Survey Department has discovered coal reserves of 130 million tons in Lakra area. Similarly, it has been proved that iron ore reserves of about 150 million tons of chamositesiderate type are available in Kalabagh-Chichali area. More deposits of chromite have been discovered in Khanozai-Hindubagh-Nasai area. Reserves of 1.4 million tons of barytes have also been proved. Substantial reserves of natural gas at Titas, Rashidpur Kailashtilas and Habiganj in East Pakistan have been discovered in the recent past.

II. THIRD PLAN PROGRAMME

6. The proposed development programme of Rs. 1,650 million during the Third Five Year Plan period will include Rs. 900 million in the Government financed sector and the balance in the Private Sector. Of this about Rs. 200 million will be required for the on-going projects of the Second Plan.

7. The Third Plan period will be characterised by intensification of geological investigations for which a provision of Rs. 100 million is made as against the provision of Rs. 30 million in the Second Plan. Although geological investigations are a continuing process, every effort will be made to finally determine the extent of known minerals deposits at the earliest possible date.

8. Provision is made in the Third Plan for Rs. 650 million as investment in oil and gas prospecting. This includes an investment of Rs. 350 million by the Government. The bulk of this investment will be made through the Oil and Gas Development Corporation but the Government will simultaneously continue to encourage the Oil Companies to undertake prospecting and will also participate in the investment undertaken by the Oil Companies.

9. The Third Plan will make the beginning of transmission and distribution of gas for industry and general development in East Pakistan. The gas transmission line from Sui in West Pakistan beyond Multan to the northern districts of West Pakistan is already in hand. Extension of distribution systems in the larger towns will be undertaken in the Third Plan but the utilisation of gas will be so planned that the exploitation of coal reserves is not hampered.

10. Coal—production in West Pakistan is proposed to be stepped up from 1.5 million tons in 1965 to 3.00 million tons in 1970. Special attention will, at the same time, be paid to the exploitation of recent finds of coal in East Pakistan which are now in the proving stage.

11. The table below states in a skeleton form the investment that is proposed in this field during 1965—70 :

TABLE I

(Million Rs.)

	Total Allocation	East Pakistan			West Pakistan		
		Central Government	Provincial Government	Private	Central Government	Provincial Government	Private
Geological survey	100	40	—	—	60	—	
Oil and gas prospecting ..	650	200	—	150	150	—	150
Gas transmission	380		130	50	—	50	150
Coal and peat	200	—	50	50	—	50	50
Selected minerals	260	20	20	40	30	60	90
Training and research ..	60	10	10	10	10	10	10
Total ..	1,650	270	210	300	250	170	450

	East Pakistan	West Pakistan	Total
Centre ..	270	250	520
Province ..	210	170	380
Private ..	300	450	750
	780	870	1,650

Physical Targets :

As a result of the proposed development programme the following increases in production of selected minerals and fuels are expected.

TABLE II

Minerals	Units	1964-65 Estimates	1969-70 Projection	Percentage Increase
Natural gas	Thousand Mill. c.f.	100	200	100
Coal	Thousand Tons	1,500	3,000	100
Sea salt	Do.	290	375	30
Rock salt	Do.	215	275	28
Chromite	Do.	50	60	20
Silica sand	Do.	17	30	76
Limestone	Do.	2,800	5,000	78
Gypsum	Do.	150	180	20
Petroleum (crude Oil) ..	Mill. Imp. Gall.	130	180	38

CHAPTER 13

TRANSPORT AND COMMUNICATIONS

TRANSPORT

Transportation facilities are fore-runners of any planned economic development. In a developing economy like that of Pakistan, the pace of progress is largely determined by the adequacy and efficiency of the transport system. The transport system, Pakistan inherited at Independence, was ill-maintained and worn out.

2. Until 1955, no systematic development programme could be undertaken; efforts were directed mainly to urgently needed rehabilitation. It was recognised that very large investment would be required to clear the heavy arrears of maintenance and replacement in all sectors of transport and to create additional capacity to meet the growing needs of the economy. But the task involved was so enormous that it could be conceived only as a longterm programme extending over several plan periods.

Progress during First and Second Plans

3. Although capacities have been substantially increased since 1955, transport requirements, in particular those involving bulk haulage, have not been met fully. The inadequacy of transport is believed to have been seriously hampering the productivity and growth of the economy.

4. With the growth of industry and with increasing urbanization, the traffic pattern is undergoing a change. While Railways and Inland Water Transport continue to bear the main burden in the movement of mineral and agricultural products involving bulk transportation, road transport, especially in West Pakistan, has been assuming an increasingly important role in the movement of manufactured goods, perishables and commuter traffic. This trend will be further intensified with the expansion of the road net-work. Civil Aviation is now emerging as an effective mode for handling traffic between the two Provinces and between important commercial and administrative centres within each Province. The shipping industry is also growing rapidly and will require large investments in order to secure a reasonable share of the overseas trade.

5. During the eight-years' period between 1955 and 1963, production increased considerably generating heavy demand for transport. A review of traffic growth during this period indicates the following annual mean rates of increase for various modes of transport ; railway passenger-miles, 4.5 percent ; railway freight ton-miles, 7 percent ; Inland Water Transport (mechanized sector), 15 percent ; the Karachi, Chittagong and Chalna Ports, 16 per cent ; air passengers, 24 per cent. Information about road transport is not precise but it is estimated that the biggest expansion has occurred in this field.

6. Most of the physical targets of the Transport & Communications Sector of the Second Plan are being fulfilled. But many transport bottlenecks continue to be encountered. The railways still find themselves unable to carry all the freight offered during peak seasons; their wagon turn-round remains comparative low due to worn out track stretches, weak bridge structures, inadequate yard and terminal facilities and an out-dated signalling system. In several cases production has to stop when bad weather renders poorly built roads impassable. Not much headway has been made in the development of tourism; a long range programme for this will have to be started during the third Plan period.

7. While the Railways, the Pakistan International Airlines and the mechanised sector of Inland Water Transport maintain and publish comprehensive statistical data about the availability of assets and the volume of traffic on various sections, no reliable information is available about the activities of road transport (private sector) and the large, un-registered non-mechanised Inland Water Transport fleet. In the absence of such statistics, a clear picture of the adequacy or otherwise of the transport system cannot be obtained. Arrangements for securing and publishing these statistics needed for planning purposes in particular, will have to be made on a systematic basis.

Requirements during the Third Plan:

8. The aggregate size of the Third Plan is much larger than that of the Second Plan and the industrial and agricultural targets much higher. The population growth and a comparison of some of the production targets for the final years of the Second and Third Plans, having a bearing on the demand for Transport, is given in Table 1 below:

TABLE 1

Comparative Statement of certain elements in the Second and Third Plans.

Items	Last year of Second Plan 1964-65	Last year of Third Plan 1969-70	Percentage increase in Col. (3) over Col. (2)
1	2	3	4
Population (millions)	113	129	14
Gross National Product (at factor cost) (million rupees).	44,000	57,000	30
Industrial production (million tons).	5·90	12·20	107
Agricultural production (million tons).	45·10	58·50	30
Mining production (million tons).	5·40	9·70	80

9. Broad indications, thus are that during the Third Plan period, the population will increase by 14 per cent; that national income will increase by about 30 per cent. Further more, the emphasis will largely be on industry, the allocation for which is likely to be 125 per cent more than the Second Plan expenditure of 5800 million. For agriculture, the allocation is to be about 116 per cent more than the Second Plan expenditure of Rs. 2940 million. All these elements will tend to generate a sharply increasing demand for transport. According to a recent study, traffic during the past decade seems to be rising at a much faster rate than the Gross National Product (GNP). It is estimated that during the decade covered by the First and the Second Plans, mechanised (rail and truck) traffic would have grown at twice the rate of GNP growth in West Pakistan. Assessments for East Pakistan do not give a complete picture due to non-availability of data relating to non-mechanised Inland Water Transport operations, which represent a very large proportion of the total traffic in that Province. However, it may be assumed that the growth rate of mechanised transportation in East Pakistan should be roughly of the same order as in West Pakistan.

10. Considering all these factors, and assuming that transport demand in the country will continue to rise at twice the rate of GNP, it can safely be said that overall increase in demand will be about 60 per cent during the Third Plan period. Detailed studies on receipt of all relevant information may indicate even larger requirements. Each available mode of transport will have to carry parts of this additional burden, and the policy will be to develop each according to its inherent advantage in providing the necessary transportation most economically and efficiently. Surveys and studies will have to be undertaken to indicate correct policy approaches, which will provide the basis for intra-sectoral adjustments in the development programme. Part of the preparatory work has already been done by the Transportation Consultants Incorporated, which would form the base for further investigations. However, it seems obvious that the main burden of bulk movements will continue to be borne by the Railways and Inland Water Transport; small consignment traffic particularly relating to perishables and consumer goods involving comparatively shorter hauls will increasingly be carried by road transport.

11. The most important tasks to be tackled during the Third Five-Year Plan will be :

(a) rehabilitation of existing assets at a faster rate than in the Second Plan ;

(b) improvement of existing facilities and expansion of capacity by the adoption of new techniques and practices so as to ensure intensive and efficient utilization of available rolling stock, motor vehicles, vessels and aircraft ;

(c) opening of new lines of communications in areas where requirements so justify ;

(d) provision of adequate repair and maintenance facilities for existing assets to ensure their optimum utilization;

(e) setting up and expansion of training and research facilities;

(f) expansion of capacity for the manufacture of vehicles, components and tools.

COMMUNICATIONS

12. The literacy campaign, the general awakening in the countryside, the rising trend towards urbanization and higher incomes are producing a rapidly growing demand for modern communication services. Trunk telephone traffic has been doubling itself almost every five years, and some 35,000 pending applications for telephones are likely to be carried forward to the Third Plan. Current indications are that the rate of demand is likely to rise even more steeply. It has been estimated that some 180,000 additional telephones will be required during the Third Plan period. The difficult inter-wing communications need to be substantially improved. The proven remedy is the provision of a submarine cable between Karachi and Chittagong which can be an economic proposition in this particular case. Broadcasting facilities are still very inadequate and will require considerable strengthening during the Third Plan period. Television has yet to be developed.

13. The programmes and allocations relating to each sub-sector are discussed in the following paragraphs :—

Railways

14. During the Third Plan period, the Railways are likely to be called upon to carry much larger volumes of traffic, originating particularly in the agricultural and mining sectors, and of capital goods. In view of the potential growth of other modes of transport, it may not be necessary to take up construction of any major railway lines in West Pakistan except those already under construction, although some small extensions may be necessary to meet operational requirements or to connect outlying areas. The main emphasis will be on increasing the line and terminal capacities of the Railways and on improving their general efficiency by replacing overage assets and adopting improved techniques of operation.

15. As stated earlier, the overall traffic demand in the economy is expected to rise by about 60 per cent during the Third Plan period. Although the traffic pattern has been changing in favour of road transport, it is anticipated that the Railways will carry about 40 per cent to 50 per cent of this additional traffic, leaving the balance for other carriers. The additional traffic to be carried by Railways is estimated to represent an increase of about 30 per cent in railway freight traffic; and of about 15—20 per cent in passenger traffic.

16. An allocation of Rs. 1,370 million has been proposed for the P. W. Railway and Rs. 900 million for the P. E. Railway. These limited allocations would, however, necessitate keeping a substantial number of overage assets in use, to meet the requirements of increased traffic.

Pakistan Western Railway

17. Of the allocation to the P. W. Railway, about Rs. 335 million would be necessary for completing the Second Plan ongoing projects, *viz.* the Kot Adu—D. G. Khan rail link ; conversion of the Hyderabad—Mirpur Khas section from M. G. to B. G. ; the Karachi Circular Railway and certain engineering and structural works, besides the outstanding payments for rolling stock.

18. The position of rolling stock on the P. W. Railway at the beginning of the Third Plan and the provision made in the Plan, are shown in Table 2 below :

TABLE 2

Description	Rolling stock (B. G.) expected to be in service at the beginning of the Third Plan	Of which average stock in service (including stock "Replaced" but still running on the line)		Provision in the Third Plan	Delivery of stock during the Third Plan period		Total 6+7
		Number	Col (3) Per-cent of Col (2)		Against orders placed in Second Plan	Against provision in Third Plan	
1	2	3	4	5	6	7	8
Locomotives :							
(*a*) Steam ..	606	268	44	220 (DE E)	5 (DE E)	173 (DE E)	178 (DE E)
(*b*) Diesel Electric and Electric (DE E).	311	..	..				
Passenger carriages	1,916	679	35	550	315	439	744
Other coaching vehicles.	1,187	649	55	285	45	214	259
Wagons ..	35,700	3,048	9	10,000	2,030	7,280	9,310

19. As indicated in Cols. 3 and 4, the proportion of overage stock on the railway is very large, and the limited funds available would provide only for partial replacement. Besides, more stock will become overage during the Third Plan period. The provision made to cover replacement and additional rolling stock requirements (Col. 5), would be 220 locomotives, 550 passenger carriages, 285 other coaching vehicles and 10,000 wagons. The actual deliveries expected against this provision and against the orders placed earlier, would be 178 locomotives, 744 passenger carriages, 259 other coaching vehicles and 9,310 wagons. This total acquisition of stock would be insufficient to meet all replacement and additional requirements. In the circumstances, a substantial part of requirements of the anticipated additional traffic will have to

be met by improving operating efficiency and by retaining overage stock in service on "condition basis" to the extent necessary.

20. Other essential requirements are the replacement and provision of plant and machinery, rehabilitation and re-construction of bridges, increasing line and terminal capacities, rehabilitation and expansion of workshops, execution of certain engineering and structural works, introduction of electric traction on the Lahore—Khanewal Section, rehabilitation of old structures and buildings, provision of a coach building factory and programmes of technical training and research. Also, the Second Plan pace of track renewal will have to be maintained. The total cost of the above requirements to be taken up for execution during the Third Plan period will be about Rs. 1,365 million, against which an allocation of Rs. 1,035 million is proposed, throwing forward the balance to the Fourth Plan.

Pakistan Eastern Railway

21. An estimated expenditure of Rs. 237 million will be thrown forward from the Second Plan for completion of the Railway's ongoing projects, which includes the Dacca realignment scheme, the Bholaganj—Chhatak ropeway, construction of new lines from Narsingdi to Madanganj, Kurigram to Chilmari and Faridpur to Barisal, doubling of track on sections between Dacca and Chittagong and remodelling of the Loco Shed at Parbatipur. Part of the throw-forward also relates to outstanding payments for rolling stock, plant and machinery and to completion of certain structural and engineering works.

22. The position of rolling stock on the P. E. Railway at the beginning of the Third Plan and the provision made in the Plan are shown in Table 3 below :

TABLE 3

Description	Rolling sotck (B. G. & M. G.) expected to be in service at the beginning of the Third Plan	Overage stock — in service (including stock "Replaced but still running on the line)		Provision in the Third Plan	Delivery of stock during the Third Plan period		
		Number	Col. (3) per-cent of Col. (2)		Against orders placed in Second Plan	Against provision in the Third Plan	Total Cols. 6+7
1	2	3	4	5	6	7	8
Locomotives :							
(*a*) Steam ..	344	205	60	110	18 (DE)	81 (DE)	99 (DE)
(*b*) Diesel Electric (DE).	102	..	..				
Passenger carriages	1,268	339	27	450	..	324	324
Other coaching vehicles.	632	250	40	200	..	144	144
Wagons ..	19,442	7,753	40	8,000	945	5,400	6,345

23. The picture emerging from this Table is very similar to that of P.W. Railway described in para 19 above. Other works provided for in the Plan include renewal and modernization of track, construction of new lines, where justified, and certain structural and engineering works.

24. The total cost of the above requirements to be taken up for execution during the Third Plan will be about Rs. 1,000 million against which an allocation of Rs. 663 million is proposed throwing forward the balance to the Fourth Plan.

Roads and Road Transport

25. With structural changes in the economy, the transport complex is also undergoing certain changes, with a comparatively vigorous development in respect of roads and road transport, especially in West Pakistan, where road transport will assume an increasingly important role in coming years. Accordingly, the programme relating to roads and road transport (including provisions under the Works Programme for roads) aims at considerable expansion, and is designed mainly to provide for short-distance light traffic, especially in rural areas and newly developing regions of the country.

Roads

26. The pattern of road traffic at present is mixed and complex, with fast-moving automobiles travelling alongside bullock carts and other slow moving vehicles. Due to the narrow width and generally poor condition of roads, as well as heterogeneous traffic, movement has to be slow, especially during peak periods. Accidents are frequent and on the increase.

27. In West Pakistan, there will be about 11,210 miles of metalled roads by the end of the Second Plan period. Many of the existing roads were built on the basis of out-dated specifications. The increased axle loads of vehicles using the roads and water-logging have damaged large sections of these roads. It is, therefore, essential to recondition and strengthen the existing road system and to save it from deterioration.

28. In East Pakistan, there will be some 2,400 miles of single-lane (about 10 to 12 ft. wide) roads by the end of the Second Plan period. This narrow width is inadequate for any trunk or arterial road system. It is proposed to widen these roads to two lanes, in phases, to accommodate the growing traffic. In addition to these, there is a pressing need for road development in the coastal belt and in areas that have until now been isolated. There is urgent need to construct small feeder roads serving transhipment points on the railways and waterways and also for connecting farms to markets and rural areas to commercial and administrative centres.

29. For the development of roads in West Pakistan, a provision of Rs. 600 million is being made—Rs. 120 million (Rs. 40 million for bridges) for ongoing schemes and Rs. 480 million for new schemes.

30. A provision of Rs. 1,000 million has been made for the development of roads in East Pakistan—Rs. 250 million for the completion of ongoing schemes and Rs. 750 million for new schemes.

31. For roads in the centrally administered areas in the Northern Regions of West Pakistan and for certain other central works, an expenditure of Rs. 50 million is proposed.

32. The programme *inter alia* includes construction and or improvement of about 1,200 miles of high-type roads in West Pakistan and 900 miles in East Pakistan, including certain bridges. This does not include roads connecting farms, villages and village markets, etc., under the Works Programme.

Road Transport

33. There has been substantial increase in the number of motor vehicles in East and West Pakistan as shown in Table 4 below :-

TABLE 4

Commercial Motor Vehicles in Service

(Thousands)

	1959	1962	1964-65 (Projected)
East Pakistan			
Trucks	2·95	5·93	7·9
Buses	1·57	2·57	3·2
Total ..	4·52	8·50	11·1
West Pakistan (including Karachi)			
	1959-60	1962-63	1964-65 (Projected)
Trucks	17·35	23·21	27·00
Buses	8·78	12·45	14·00
Total	26·13	35·66	41·00
Grand Total ..	30·65	44·16	52·1

Source : Provincial Transport Authority.

34. The position of bus and truck fleets at the beginning of the Third Plan and the provision made in the Plan are indicated in Table 5 below:

TABLE 5

(Thousands)

	Number expected to be in service at the beginning of Third Plan	Of which over 10 years old (estimated)		Provision in the Third Plan	Delivery against the provision in Col. (5)
		Number	Percentage		
1	2	3	4	5	6
West Pakistan					
Buses	14·0	4·7	34	7·5	6·8
Trucks	27·0	8·4	31	10·0	9·0
Total ..	41·0	13·1	32	17·5	15·8
East Pakistan					
Buses	3·2	1·4	44	4·0	3·6
Trucks	7·9	2·2	28	11·0	9·9
Total ..	11·1	3·6	32	15·0	13·5
All Pakistan					
Buses	17·2	6·1	35	11·5	10·4
Trucks	34·9	10·6	30	21·0	18·9
Total ..	52·1	16·7	32	32·5	29·3

35. At the beginning of the Third Plan, there will be about 11,100 commercial vehicles (buses and trucks) in service in East Pakistan and about 41,000 in West Pakistan. Of this fleet, about 3,600 vehicles in East Pakistan and 13,100 vehicles in West Pakistan will be over 10 years of age, which approximates the working life of a commercial vehicle. The provision made in the Third Plan (17,500 vehicles for West and 15,000 for East Pakistan) is meant for augmenting the fleet and replacing part of the over-age fleet. However, it is presumed that the actual deliveries will be less by about 10 per cent and that most of the old vehicles including those becoming over-age during the Third Plan period, will continue to be retained in service, regardless of their economic working life.

36. A financial outlay of Rs. 1,230 million is envisaged for the development of commercial road transport in the country—Rs. 680 million for West Pakistan, and Rs. 550 million for East Pakistan. Some important aspects which have been rather neglected in the past relate to proper maintenance of vehicles and provision of workshop and training facilities. It is envisaged that 10 percent of the allocation made in the Plan (i.e. over Rs. 120 million) will be utilized for the provision of such facilities.

Inland Water Transport

37. Inland water transport is the main-stay of the transport system of East Pakistan. Given suitable navigational facilities and terminals, it should be the most economical method of haulage of goods, particularly of bulk cargo. The efficient operation of inland water transport is dependent on the provision of a number of services such as navigational aids, maintenance of water channels and existence of good inland port and terminal facilities for passengers and for handling and storage of cargo. Until 1958, these services were being provided by several independent and diffused agencies, but in that year the East Pakistan Inland Water Transport Authority was established to provide essential services, to regulate traffic and rates and to plan for the future development of inland water transport.

38. By the end of the Second Plan period, the Authority would have completed the initial phase of its work by providing certain navigational and operational facilities, by building up a suitable organization and carrying out surveys and investigations. The Authority will thus be ready at the beginning of the Third Plan period to launch a major development programme. To make possible an accelerated development of inland water transport in East Pakistan, an allocation of Rs. 930 million is made in the Third Plan—Rs. 410 million in the Public Sector and Rs. 520 million in the Private Sector. The programme aims at improving all the major river ports, providng modren navigation and other related facilities and augmenting and modernising the transport fleet.

Ports

39. The traffic moving through the ports has increased substantially during the Second Plan period. The growth of traffic through the ports in the past decade is shown in Table 6 below :

Table 6

Traffic through the ports.

(Thousand tons)

	1954-55	1959-60	1962-63	1964-65 (Projected)
Karachi Port	3,072	4,590	5,562	6,300
Chittagong Port	1,392	2,644	3,221	4,200
Chalna Anchorage	479	886	1,504	2,000
Total ..	4,943	8,120	10,287	12,500

40. Adequate port capacity is particularly important in view of the increasing import and export trade, as well as the inter-wing traffic moving through the ports. The international trade during the Third Plan, mainly through the ports is estimated to increase from Rs. 4,700 million in 1964-65 to Rs. 6,100 million in 1969-70 of imports and from Rs. 2,250 million in 1964-65 to Rs. 3,450 million in 1969-70 of exports, exerting further strain on the handling capacity of the ports.

41. During the Second Plan period several new schemes (total cost Rs. 120 million) were taken in hand with the object of expanding the capacity of the ports. Work on these schemes such as widening and deepening of channel, and construction of three additional berths at Karachi Port, reconstruction of old jetties 1 to 6 and slipway including workshop and machinery at Chittagong Port, and provision of craft and equipment and other facilities at Chalna Anchorage, would be completed during the Third Plan.

42. Some of the Karachi Port schemes, which could not be completed during the Second Plan period, will be completed during the Third Plan period. These include the reconstruction of berths 1 to 4 and rehabilitation of the Manora Break-water.

43. Besides the completion of the above stated on-going projects, the Third Plan provides for improving the existing port facilities at Karachi and Chittagong and converting the Chalna Anchorage into a permanent major port possibly at Mongla. A feasibility study for establishing a second port on the Mekran coast in West Pakistan is being undertaken. An allocation of Rs. 610 million is made for ports as indicated below :

	Allocation (Million Rupees)
Karcahi Port	290
Chittagong Port	220
Chalna Anchorage	90
Mekran Coast Port	10
Total ..	610

Shipping

44. A large share of the country's international traffic, which amounted to over 9 million tons in 1962-63, is at present being carried by foreign ships, causing a drain on foreign exchange resources to the extent of Rs. 400 to Rs. 500 million annually as freight charges. It is,

therefore, considered necessary to develop the national merchant fleet. A Shipping Corporation has recently been set up to supplement the private sector efforts in this field.

45. At present, Pakistan has 43 ships of which 16 are old, requiring replacement. Arrangements are being made to acquire 35 additional ships by the end of the Second Plan period. Thus, after catering for the replacement needs, Pakistan's Merchant Fleet would increase to 62 ships by the end of the Second Plan period.

46. During the Third Plan period, 28 ships are proposed to be acquired, 8 to replace old vessels and 20 to augement the country's share in international shipping. A provision of Rs. 300 million is being made.

47. To meet the personnel requirements of the expanding merchant fleet, the Mercantile Marine Academy at Chittagong will have to be expanded and an amount of Rs. 4 million is accordingly provided for the purpose.

Tourism

48. A properly organized tourist industry in Pakistan can contribute substantially to the foreign exchange pool. The country has numerous places of historic interest and scenic beauty which could attract a large number of tourists from abroad if a good standard of accommodation and travel facilities is made available. Some facilities have already been provided at certain places but there is need for greater efforts to develop tourism on a country-wide basis. Some of the deficiencies in the development of tourism arise at present from want of publicity at home and abroad as well as lack of adequate hotel accommodation, transportation and recreational facilities in areas of tourist interest. An expenditure of Rs. 20 million is proposed in the public sector and of Rs. 200 million in the private sector to overcome some of these deficiencies during the Third Plan period.

Civil Aviation

49. Air transport is of crucial importance to Pakistan because of the physical separation of the two Provinces, the long distances in West Pakistan and the riverine terrain of East Pakistan. Efforts made during the past ten years to build-up and improve this mode of communications have resulted in notable progress. The principal achievements include the provision and expansion of airports and other allied facilities and initiation of regular scheduled airlines services to 18 important cities and towns in East and West Pakistan. A "Jet" runway was completed at the Karachi International Airport; *ad-interim* arrangements for the handling of Boeing 720-B

aircraft were completed at Dacca and Lahore and the provision of a controlled airway between Karachi and Tehran is nearing completion. Plans for the provision of appropriate airports at Dacca, Lahore, Rawalpindi and Chittagong and of terminal facilities at Karachi are being drawn up. An entirely new airfield at Ishurdi in East Pakistan has been constructed ; other airports most of which are remnants of the last war have been renovated extensively. Past and current economic development in Pakistan and increased domestic, inter-zonal and international trade have resulted in sustained growth of both air passenger and air cargo traffic enabling the Pakistan International Airlines to augment its equipment and to expand its domestic as well as international net-work.

50. Pakistan International Airlines's fleet modernization programme under the Second Plan has been mostly implemented ; three Boeing 720-B, and five Fokker F-27 aircraft and three S-61N Helicopters have been acquired ; a number of new fixed wing aircraft routes have also been added while frequencies on other such routes have been increased. In addition, Helicopter Services have been introduced to 15 locations in East Pakistan. Capacity ton miles increased from 15.3 million in 1955-56 to about 44 million in 1959-60 and to about 93 million in 1962-63. Correspondingly, revenue ton miles increased from 8.1 million to nearly 27 million and to about 58 million. The number of revenue passengers carried increased from 10,700 in 1955-56 to 240,000 in 1959-60 and to 583,000 in 1962-63 while cargo carried increased from 1,600 tons to 11,000 tons and to over 19,000 tons respectively. Operating revenues increased from about Rs. 20 million in 1955-56 to about Rs. 80 million in 1959-60 and to Rs. 180 million in 1962-63. The organizational and structural pattern of Pakistan International Airlines and the Civil Aviation Department has undergone considerable improvement.

51. The need for further development of air transport industry still persists and bigger efforts are needed to improve and enhance the scope of the activity,

(a) More regular airports and airways have to be developed by the Civil Aviation Department. Large scale improvements planned for Dacca, Karachi, Lahore, Rawalpindi and Chittagong in the Second Plan period, will have to be implemented in the Third Plan period. Improvements are necessary in the airports at Lyallpur and Multan in West Pakistan. An entirely new airport is needed at Khulna in East Pakistan. Urgent action is also necessary to build-up the indigenous capabilities and to provide the required equipment for the construction of appropriate airport facilities.

(b) The upward trend in the growth of air traffic is likely to continue during the Third Plan period, there is little doubt that the Pakistan

International Airlines will be called upon to provide more services particularly for the internal feeder routes and for the expeditious movement of postal mail under the "Night Air Mail Scheme". While it might be possible to meet, for sometime more, longer haul requirements with the existing Jets and Super-constellations it would be necessary to acquire an adequate number of aircraft to provide for replacements and additions to the Pakistan International Airlines fleet.

(c) Facilities for flying clubs have to be enlarged and more training equipment has to be provided. Efforts to reach the smaller communities through such means as experimental services by the flying clubs or through co-operative efforts of a local character should be encouraged. The training programme in all aspects of civil air transport will be supplemented.

(d) It will be worth-while for the Civil Aviation Department to undertake a study for the preparation of a Master Plan for the development of civil aviation on a long-term basis.

52. The Third Plan proposes a programme of Rs. 580 million for Civil Aviation—Rs. 300 million (tentative) in the public sector for the Civil Aviation Department mostly for the ongoing schemes for the improvement of airports and allied ground facilities; and Rs. 280 million in the private sector for the Pakistan International Airlines Corporation for the purchase of aircraft and associated airline facilities.

Postal Services

53. Starting with 5,650 post offices in 1947, the country now has nearly 11,400. The Second Plan target of 1,300 new post offices is expected to be fully achieved. An all-up air mail scheme has been introduced to speed-up the "letter mail" in the country. Special services like Postal Savings and Postal Life Insurance have made considerable progress; net collections under the postal savings scheme have amounted to Rs. 420 million during the past five years, the number of postal life insurance policies having increased from 11,500 in 1953 to about 86,000 in 1962.

54. The expansion of these services has to be continued in proportion to the increasing educational facilities and rapid industrial and commercial developments.

(a) There is an increasing demand from the villages and especially from the Union Councils for the provision of postal facilities. Therefore, 2,000 new post offices, mostly in the rural areas, are proposed under the Third Plan, the aim being to provide a post office for each village of 1,500 or more population. The expenditure on this account will be met from the revenue budget as usual and fresh openings of post offices will continue to be subject to the condition that the maximum loss shall not exceed Rs. 600 in each case.

(b) The expanding services need re-construction of old and construction of new post office buildings. The post office owns over a thousand office buildings several of which are 50 to 60 years old and over 200 of them are in urgent need of renovation and/or extension. Buildings suitable for postal operations are ordinarily not available for renting in the growing urban areas and the rentals are, in any case, mostly prohibitive. The construction of some new office buildings is, therefore, unavoidable.

(c) A joint Post Office—Pakistan International Airlines scheme for "Night Air Mail" together with the re-organization of the mail collection, sorting and despatch arrangements is imperative to speed-up the operations, particularly for the exchange of all kinds of mail between the major commercial, industrial and administrative centres both in East Pakistan and West Pakistan.

(d) Other requirements are introduction of mechanical equipment in the larger post offices to ease the situation in the busy hours; road vehicles for the expeditious surface movement of mail in conjunction with its air-speeding and for financing village post offices where payment of foreign money orders is particularly heavy and the provision of staff quarters and other staff amenities on a large scale.

(e) The conversion of the present departmental branch for Postal Life Insurance into a full fledged "Government Postal Life Insurance Corporation" is also necessary to develop this essential activity on business lines proper.

55. An allocation of Rs. 80 million is proposed for the post offices inclusive of Rs. 10 million for Government Postal Life Insurance Corporation.

Telegraphs and Telephones

56. The Second Plan telecommunication development programme is making rapid progress. The number of telephones, which increased from 15,200 in August, 1947 to 75,000 in June 1960, will have gone up to about 1,35,000 by June, 1965. Laying of co-axial cables between Karachi—Lahore|Rawalpindi in West Pakistan, installing of VHF|UHF systems between Chittagong—Dacca—Khulna in East Pakistan and installation of a micro-wave link between Karachi—Tehran and Ankara will have been completed by 1965. The planned expansion of the present HF inter-wing facilities and construction of communication facilities in the country-side, particularly in the coastal areas of East Pakistan, will have made substantial progress. Subscribers Trunk Dialling (STD) which is an economical and a more satisfactory way of handling trunk calls than the older manual method, has already been introduced between Karachi—Hyderabad, Lahore—Lyallpur/Sargodha and between Chittagong—Dacca and about a dozen of such additional installations are in

hand. The Second Plan scheme for the expansion of the Haripur Telephone Factory is nearing completion and the setting-up of a Telecommunication Research Centre at Haripur has made significant progress. A study of the long-term telecommunication needs is being undertaken with the assistance of the UN Special Fund.

57. Inspite of the addition of about 60,000 telephones during 1960-65 some 35,000 uncomplied applications for telephones are likely to be carried forward to the Third Plan as against 24,000 brought forward to the Second Plan. The total requirement of telephones during 1965-70 is estimated at 1,80,000. The trunk call traffic is rising fast, almost doubling itself in every five years. Inland trunk calls increased from 1.17 million in 1950|51 to 5.24 million in 1959|60 and further rose to 8.00 million in 1962-63. The rising trend is expected to continue during the Third Plan period. The number of telegrams has increased from 3.37 million to 4.72 million and to 5.52 million correspondingly. The number of daily inter-wing trunk calls has increased ten-fold over the period 1950|51 to 1962|63.

58. The development of tele-communication services is being undertaken as a continuous programme. Schemes worth Rs. 240 million are likely to be carried forward to the Third Plan. The Third Plan proposes the installation of about 1,50,000 additional telephones. A programme of Rs. 880 million is proposed for the telegraph and telephone services in the public sector to cater for the more urgent needs. This allocation will enable the provision of 1,20,000 telephones (nearly 1,00,000 in the urban areas and about 20,000 in the rural areas) besides other essential requirements. Thus Karachi will have 27,000 additional telephones (an increase of about 50%); Dacca 18,000 (120%); Lahore 14,000 (about 80%); Chittagong 8,000 (nearly 133%); Rawalpindi|Islamabad 6,000 (60%); Khulna 3,000 (150%); Hyderabad 3,000 (66%); and Rajshahi 1,000 (120%). An additional 30,000 telephones are proposed through the private sector contribution of Rs. 100 million.

59. (a) As a means of accelerating the development of telephones, the feasibility of private sector participation should be explored; necessary allocations have been earmarked tentatively.

(b) Further improvement of the presently inadequate inter-wing tele-communications is imperative. High priority needs, therefore, to be given to improve these communications by :—

(i) a mirco-wave scatter communication system *via* Nepal ;

(ii) a sub-marine cable between Karachi and Chittagong, a study of which has already been undertaken ;

(iii) Participation in the proposed international programme for satellite communications.

(c) To handle the increasing inland trunk call traffic satisfactorily, within both the provinces, substantial additions to the trunk telephone net-work will be required. It is proposed to extend the Karachi-Tehran micro-wave link to Rawalpindi ; to lay a co-axial cable between Lahore-Kharian and Rawalpindi-Peshawar in West Pakistan as well as between Dacca-Chittagong in East Pakistan ; and to provide additional channelling equipment on some of the sections of the existing co-axial cable between Karachi-Lahore|Rawalpindi. For secondary sections, construction of minimum additional overhead lines, installation of some more carrier telephones and VFT systems and expansion of the trunk exchanges is proposed. Subscriber trunk dialling will be made available within each province between all major telephone exchanges. Special efforts will be directed towards the extension of the telephone and the telegraph facilities to the rural areas, particularly to those areas, where at present even the elementary facilities either do not exist at all or have not progressed beyond the 19th century stage.

(d) The cable factory previously provided for in the Industries Sector has not materialised. This is causing a good deal of inconvenience in the orderly and fast development of the telephone system. A departmental factory for manufacturing telephone cables will, therefore, have to be set-up. Simultaneously production of electronic components for telecommunications equipment will have to be organized.

(e) Investigation for the development of a suitable electronic switching system for automatic telephone exchanges will have to be made.

(f) To cater to the increasing needs for skilled personnel, the training programmes will have to be suitably augmented.

Broadcasting and Television

60. The Second Plan programme for the development of broadcasting is likely to be fully implemented. By 1965, there will be full-fledged broadcasting stations at Karachi, Hyderabad, Quetta, Lahore, Peshawar and Rawalpindi in West Pakistan and at Dacca, Rajshahi and Chittagong in East Pakistan in ddition to relaying stations at Sylhet and Rangpur. One 100 KW medium-wave transmitter has already been installed at Dacca and a similar transmitter is in an advanced stage of installation at Lahore. By the end of the Second Plan period, the coverage of the primary service, through the medium-wave, in West Pakistan, will be about twenty-five percent of the area but about forty percent of the population. In East Pakistan the coverage will be over 90 percent in respect of both. For the short-wave transmission, one 100 KW transmitter at Dacca and two 100 KW transmitters at Islamabad presently under installation, will provide the much needed East Pakistan-West Pakistan link, help increase the scope of the secondary internal services and supplement the presently inadequate external services.

61. The objectives of the Third Plan will continue to be the establishment of a reliable medium-wave coverage for the whole of the country on the one hand and to increase the present facilities in the short-wave to

provide more internal secondary services, to inter-link the most important cities like Karachi, Dacca and Islamabad and to project the external services effectively. It is proposed to extend the area coverage in West Pakistan to sixty-five percent with a population coverage of about eighty-five percent. It is also proposed to cover the remaining area in East Pakistan. For the sake of economy the aim will be to restrict the number of the originating stations to the minimum and to open relaying stations in the initial stages.

62. It is accordingly proposed to establish a full fledged medium-wave station at Multan and relaying stations of 10 KW each at Khairpur, Bahawalpur, Dera Ismail Khan, Sargodha and Kalat in West Pakistan and at Khulna, Barisal and Comilla in East Pakisan. It is also proposed to raise the power of the relaying stations at Sylhet and Muzzafarabad to 10 KW and to complete the work at Rangpur. Apart from this, it is proposed to raise the power of the present medium-wave transmitters at Dacca and Rawalpindi to 250 KW and of those at Peshawar and Quetta to 100 KW. It is further proposed to complete the broadcasting houses at Islamabad and Karachi and to provide second channels at Karachi, Lahore and Dacca. It is also proposed to provide for the urgently required replacements and improvements and to augment the supporting equipment at the existing stations and to provide for a vigorous programmes of training and field research.

63. For the short-wave services it is proposed to install one 10 KW short-wave transmitter in the northern regions of West Pakistan, one 100 KW short-wave transmitter at Karachi and a 250 KW short-wave transmitter at Islamabad exclusively for the external services.

64. In order to develop the listening-end of broadcasting it is proposed to commence the fabrication of electronic components for the listening sets in association with the private sector.

65. Television, with a strong emphasis on the educational aspects particularly in the agricultural field, will be introduced. Private enterprise, both foreign and local, is proposed to be associated. Pilot stations will be set up at the headquarters of the Agricultural Universities with a view to developing suitable programmes. Educational-*cum*-recreational TV programmes for the most important centres like Karachi, Lahore and Dacca are being organized.

66. The Third Plan provides a sum of Rs. 120 million for broadcasting and television, Rs. 100 million in the public sector and Rs. 20 million in the Private sector, the latter for television.

67. The tentative allocations to various sub-sectors, which are subject to modification on the basis of further surveys and studies, are shown in Annexure A. The physical targets are given in Annexure B.

Annexure A.

Transport & Communications Development Programme, 1965—70.

(Million Rs.)

Public Sector	E. P.	W. P.	Centres	Total
1. Railways	900	1370	..	2270
2. Roads	1000	600	50	1650
3. Road transport	50	..	..	50
4. Inland water transport authority	410	..	..	410
5. Ports :—				
Chalna	..	..	90 }	100
Mekran	..	..	10 }	
6. Shipping :				
Mercantile Marine Academy	..	..	4 }	10·5
Corporation		..	6·5 }	
7. Tourism	..	..	20	20
8. Civil aviation	..	..	300	300
9. Post Offices :—			70	
Government Postal Life Insurance Corporation	..	..	10	80
10. Telephones and telegraphs ..	..	..	880	880
11. Broadcasting	..	..	90 }	100
Television Corporation ..	..	..	10 }	
Total Public Sector ..	2360	1970	1540·5	5870·5
Private sector :				
1. Road transport :				
Corporations	..	..	..	100 } 1180
Private	..	..	..	1080 }
2. Inland water transport ..	..	..	..	520
3. Port trusts :				
Karachi	..	..	..	510
Chittagong	..	..	..	
4. Shipping :—				
Corporation	..	..	..	293·5
Private	..	..	..	
5. Tourism	..	..	..	200
6. Pakistan international airlines corporation.		..	..	280
7. Telephones	..	..	..	100
8. Television corporation ..	..	..	..	20
Total private sector ..	..	..	..	3103·5
Grand Total ..	..	..	..	8974·0

Annexure B.

Transport & Communications Physical Targets of the Third Five-Year Plan.

Serial No.	Description	Unit	Targets 1965—70
1.	Railways :		
	Locomotives	Number	277*
	Passenger carriages	,,	1068*
	Other coaching vehicles	,,	403
	Wagons	,,	15,655*
	Track renewal	Miles	1,200
2.	*Roads* :		
	Construction and improvement of high-type roads	Miles	2,100†
3.	*Road Transport* :		
	Buses	Number.	10,400
	Trucks	,,	18,900
4.	*Telegraphs and Telephones* :		
	Additional telephones	Thousands.	150
5.	*Post Offices* :		
	Additional post offices	Number.	2,000

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*Inclusive of deliveries expected in the Third Plan period against the orders placed in the Second Plan period.

†This does not include roads connecting farms, villages and village markets etc., under the Works Programme.

CHAPTER 14

EDUCATION AND TRAINING

The concept of education as a vital national investment and a major determinant of the nation's economic growth underlay the recommendations of the Commission on National Education and of the Second Five-Year Plan. The Third Plan will be based even more firmly on this concept of education and guided by the following basic and inter-related objectives of educational planning in the country :—

(i) to provide an educational system which would facilitate transition into an era of science and technology, promote political, social and economic development and bring the country's spiritual and cultural heritage into harmony with the contemporary world ;

(ii) to provide the youth of the country with conditions conducive to the full-fledged development of their individual capacities and character ;

(iii) to raise the quality of education at all levels so that it may properly fulfil its nation building tasks.

I. RATIONALE OF THE THIRD PLAN PROGRAMMES

2. The Third Plan will be squarely directed towards a well balanced and integrated development at all levels of education. Externally, the programmes will seek close consistency with other sectors of national life, and will be geared strongly to the economic needs of the country. They will emphasize practical utility and encourage attitudes of mind conducive to acceptance of change and social progress. Internally they will aim at complementarity and harmony within the education-mix, helping smooth and substantial flow of children and youth from one level to another, consistent with individual differences, needs, aspirations and aptitudes, aided by appropriate guidance and supported by suitable scholarships.

3. Quality education will be the keynote of the Third Plan. Vigorous efforts will be made to improve the quality of education at all stages. Experience in developing societies has already shown that in the field of education, emphasis on quality, instead of militating against quantitative expansion, can actually serve to encourage it.

4. Two other crucial concerns of the Third Plan will be widening the base of primary education and greatly increasing the facilities for the technical and vocational education. Heavy investment at the primary level is necessary in order to reveal talent and to lay the basis of attitudes of mind essential to development. This will improve the

secondary and higher stages of education, which have been recruiting from too narrow a base in the past.

5. The expansion of primary education depends, mainly, on three related factors ; the prevention of dropouts, greatly expanded supply of better qualified teachers, and better facilities making the school more attractive to children. The increase in the number of teachers, moreover, must be matched by improvement in their quality if the schools are to reach the desired standards. There are several means of achieving this end—improved initial training, increased inspection and supervision, greater facilities for in-service training and incentives for professional advancement. One of the most important steps will be to develop and enlarge a special corps of teachers of teachers. These would be highly qualified professionals, who would enrich the whole system of teacher education. To attract really suitable persons to this cadre it will be necessary to improve the salary scales as well as general conditions of work.

6. It is of great importance that children coming up through the expanded primary system should have the opportunity to go on to further schooling. Facilities for appropriate secondary education have therefore to be extended to a certain realistic size. It is at this stage that vigorous efforts are necessary for the introduction of diversified courses and the induction of a large percentage of students into subjects such as industrial arts, agriculture, commerce and home economics. Here some guidance and counselling becomes important for directing students to the most appropriate forms of education, to apprenticeship, to craft training or to the study of science and mathematics consistent with their interests and aptitudes.

7. It is imperative that various educational issues and problems be resolved through empirical research and inductive surveys rather than by *ad-hoc* judgments. Efforts will be made to strengthen and encourage the programme of educational research in both the provinces. For this purpose the research programmes, both basic and applied, of the Institutes of Education and Research and the other organizations in this field, will be appropriately strengthened and supported.

8. At the college and university level the emphasis must be on consolidation. The proportion of degree students is already high in relation to enrolment in Secondary Schools, but the standards of many are regretably low and the subjects studied are often only of marginal value for the development of the country. Here too, the emphasis should be on raising the quality rather than the number enrolled, and on expanding the teaching of science and technology. The ratio of students engaged in scientific and technological subjects, to those studying

languages and humanities, etc., is considered to be extremely inadequate. This ratio needs to be increased immediately. It has been pointed out that real bottleneck lies at the higher secondry stage of studies, where a large number of students desiring admission in science classes are denied the opportunity for lack of facilities in these institutions. Immediate and urgent steps are necessary to increase such facilities at this level, so that the intake of science students at institutions of higher education can be expanded. Improvement of the quality of teachers and teaching should remain the primary objective of colleges and universities.

9. The need for technical education at a variety of levels is widely recognized and progress has been more rapid in this field than in any other during the last few years. Nevertheless, the whole field of technical training and education is still unco-ordinated and disjointed, and is being covered by so many un-related agencies. A national manpower policy needs to be framed which would attempt to gear the products of different levels and types of vocational training and education to the needs of development. Although some exercises have been undertaken to determine the shortages of trained manpower at various levels, there is further need of detailed analysis of future manpower requirements. Studies of this problem will be carried out during the Third Plan. Transference of a much greater educational effort to these areas is clearly an immediate imperative. Subsequent developments will be closely guided by the findings of these manpower studies.

10. With greatly increased enrolments and more diverse opportunities of the Third Plan, the ablest children should be retained in the educational system, and guided into the types of education most suited to their talents and leading to the most suitable employment openings. For these purposes an effective system of educational and occuptional guidance will be developed, while a massive programme of scholarships will help the talented youth to flow into appropriate branches of the educational system.

11. The programmes are not rigid and static. As more experience and knowledge is gained during the course of the Plan period, and detailed information is made available through research and study, the programme will grow and develop in accordance with the dynamic needs of the economy and society. In fact, flexibility is already built into the procedures of the Plan, whereby the Annual Development Programmes take care of the changing requirements of national economy.

II. PROGRAMME FOR THE THIRD PLAN

12. The following paragraphs discuss the tentative programmes and policies at various levels of Education and Training, which will later be crystallized into specific and concrete schemes after fuller discussions with the relevant agencies of Provincial and Central Governments. The proposed allocations by main educational stages are given in Table I. A comparative picture of the relative priorities of Education at various

levels in the First, Second and the Third Plans is presented in Table II. Table III shows the approximate recurring liabilities of the Central and Provincial Governments.

13. Financial allocations set out in Table I are not the only funds being made available for expenditure on human resource development in the Third Plan period. Educational and training programmes relating to Agriculture, Health, Industry and Commerce, Transport and Communications, Housing, Manpower and Social Welfare are included in their respective sectoral programmes.

TABLE I

Tentative Proposals for allocations under Education and Training Sector during the Third Plan.

(Million Rs.)

Sub-Sectors	East Pakistan	West Pakistan	Central Govern-ment	Total
1. Elementary education:				
(*a*) Primary	350	250	..	*600
(*b*) Middle/Junior High	125	95	..	220
2. Secondary education:				
(*a*) Secondary	125	120	..	245
(*b*) Higher secondary/intermediate ..	60	60	..	120
3. Teacher education	80	80	..	160
4. Technical education	360	300	..	660
5. Colleges	60	65	..	125
6. Universities	120	100	..	220
7. Scholarships	100	100	..	200
8. Social and cultural activities	10	10	..	20
9. Special Projects	10	10	..	20
10. Educational schemes of forntier Regions ..	..	10	..	10
11. Educational schemes of Central Government (Education, Kashmir Affairs, Establishment, Economic Affairs, etc.).	..	..	130	130
12. Training schemes in public administration	..	..	10	10
Total for Public Sector ..	1,400	1,200	140	2,740
13. Private sector investment	200	100	..	300
Grand Total ..	1,600	1,300	140	3,040

*This sum would be supplemented by the allocation for Education in the Works Programme. This is estimated at Rs. 180 million of which by far the greater part is expected to be spent on primary education.

TABLE II

Priorities in the Education Sector

(Million Rs.)

Sub-Sectors	First Plan (Actual)		Second Plan (estimated) Actual)		Third Plan Allocation	
	Amount	%	Amount	%	Amount	%
Primary education	74	20	101	9	600	22
Secondary education	72	19	183	17	585	21
Teacher education	9	2	70	6	160	6
Technical education	22	6	260	24	660	24
Higher education	100	26	280	25	345	13
Scholarships	5	1	93	8	200	7
Miscellaneous	98	26	115	11	190	7
Total ..	*380	100	1,102	100	2,740	100

*In terms of the concept of the Second Plan, the expenditure amounts to only Rs. 230 million.

TABLE III

Increased Recurring Expenditure required during The Third Plan

(Million Rs.)

Sub-Sector	East Pakistan	West Pakistan	Central Govern-ment.	Total
Primary education	290	360	..	650
Secondary education	77	100	..	177
Teacher education	21	30	..	51
Technical education	70	60	..	130
Higher education	20	30	..	50
Miscellaneous	22	20	10	52
Total ..	500	600	10	1.110

Note.1—Figures indicated against Secondary education in Tables II & III include expenditure on middle/junior high and high secondary stages.

2.—In 1969/70 the recurring expenditure of the proposed programmes is likely to be Rs. 404 million out of which the shares of East Pakistan, West Pakistan and Centre are estimated at Rs. 180 million, Rs. 220 million and Rs. 4 million respectively.

Primary Education :

14. The objective of the Third Plan is greatly to increase enrolment at the primary level in order that universal primary education may be achieved as early as possible within the Perspective Plan period. To this end it would be desirable to increase the total enrolment figure from about 45% in 1965 to approximately 70 per cent of the primary school age group in 1970. This is a very considerable advance on the existing enrolment and will necessitate a most vigorous action by Provincial Governments and local authorities.

15. As a first step towards this end, it is proposed to offer opportunities for enrolment in Class I to between 75 and 85 per cent of the nation's children. However, in view of the high rate of drop-outs enrolment figure either for the whole age group or for Class I are not a very reliable guide to the total educational situation. More important than this increase in enrolment in Class I will be an increase in retention of the children so that 50 per cent of the appropriate age group are in Class V, instead of less than 20 per cent as at present. To achieve this very significant and ambitious increase will constitute a challenge to the Provincial and Local authorities, who will have to take the most vigorous measures to reduce the rate of drop-out by improving the quality of education offered and, in order to do so, to find additional funds. The possibility of increased enrolment beyond the stated proportions will mainly depend on a greatly increased registration of girls. This, in turn, depends on a widespread change of social attitudes.

16. The situation regarding primary school enrolment differs markedly between East and West Pakistan. In East Pakistan there is a much higher initial enrolment in Class I, followed by a greater rate of drop-out. In order to reach the overall enrolment proportions in Classes I and V, it would be necessary that about 85 per cent of the age group should be enroled in Class I in East Pakistan (which is very close to the present figures) while efforts should be made to increase actual enrolment in West Pakistan to 75 per cent. In Class V the first target would be to retain 45 per cent of the age group in East Pakistan and 55 per cent in West Pakistan.

17. One of the most crucial factors influencing the rate of drop-out has been identified as the quality of education. This means, in the first place, that the most energetic steps must be taken to improve the quality of the teachers. These measures are considered in paragraphs 32 to 35. At the same time the teaching profession will have to be made more attractive by improving salary scales and other conditions of work so that suitable persons are drawn to it and retained in it in greater numbers. It will be equally necessary to ameliorate the physical conditions of schools so that they are more attractive to children. The problems

of drop-out, which are not only educational but also economic and social, will be subjected to careful study and review.

18. The objective of improving the quality of primary education demands that emphasis be placed on improving the syllabi of institutions responsible for the training of teachers, and on the development of new techniques and materials for teaching. The primary curriculum itself needs to be developed. At this stage in the child's development the foundation is laid of attitudes towards life and the material environment. Special emphasis will be placed, *inter-alia,* on laying the basis for objective thinking. It will also be important that children begin to understand the possibility of rational control of the environment and the objectives of socio-economic development. As a large percentage of primary school children do not, as yet, go on to secondary education, it will also be necessary to introduce elementary agriclutural and craft courses indigenous to particular localities in Classes IV and V in 10,000 selected primary schools in East Pakistan and 5,000 in West Pakistan.

19. The central problem in developing primary education is that of finance. Funds required to meet the needs of primary education are so large that special efforts by the Government as well as the local communities will be needed to raise them. Several suggestions have been made for generation of additional funds. Some of these have already been tried out and experience shows that it is a difficult task to raise additional funds either through local taxation or in the shape of direct contributions from the local communities. It is suggested that more vigorous efforts should be made to raise local resources for primary education, if the effect of the heavy developmental expenditure in the Third Plan is not to be critically negated. Expansion at this stage necessarily involves substantial increase in recurring costs. Provincial Governments have therefore to explore minutely every possible source of additional finances and make vigorous and sustained efforts to find them.

Middle or Junior High Stage :

20. Education at the Junior High Stage consisting of Classes VI, VII and VIII, is eventually to be made compulsory for all children during the perspective plan period. The Third Plan programme will include expansion of educational facilities to accommodate 760,000 additional children. This will increase the enrolment in these classes to 1.8 million in 1970.

21. Curriculum at this level needs careful attention. This level of education coincides with the period of early adolescence of the pupils, when their peculiar social, emotional and physical needs have to be attended to besides their mental and intellectual growth. At this stage,

school curriculum has also to be expanded to include diversified subjects, craft work and pre-vocational courses, which the youth have to be encouraged to explore. Special attention should be paid to such improvements in the quality of their education as will reduce the high rate of drop-out.

Secondary Education :

22. Education at the secondary level comprises two stages at present : (a) secondary consisting of Classes IX and X and (b) Higher Secondary or Intermediate comprising Classes XI and XII.

23. Secondary education is of utmost practical importance to Pakistan. While the expanded primary education provides the nation with a wider base of talent, it is at the secondary stage that this talent acquires the education and training through which it may contribute to the economic and social life of the country. Primary education creates a potential, and higher education can currently be only for the relatively few. It is secondary education that provides the largest number of people the requisite skills and intellectual ability to meet the immediate and multifarious needs of a rapidly expanding economy. This stage of education should therefore be looked upon mainly as terminal rather than merely preparatory to university. It is for this reason that secondary education in Pakistan is undergoing something of a revolution. It is changing in form, from one which was predominantly literary and general, to one which is largely geared to the needs of industry, agriculture, commerce and government. This shift is the essence of one of the major recommendations of the Commission on National Education. The country can ill afford to see secondary school leavers pursuing subjects of study for which there is no economic demand, and thus creating a class of educated unemployed.

24. Highest priority at this level will be accorded to the rapid introduction and development of a diversified curriculum. Two or more electives will be introduced in a majority of secondary schools, from the wide range of subjects in industrial arts, agriculture, commerce, home economics, and other prevocational, mechanical and technological disciplines. The focal centre of this development will be the district high school, which should be partially residential, and fully comprehensive, offering the widest possible choices in the elective subjects mentioned above, fully equipped with laboratories, library, science equipment, workshops, apparatus, machinery, other teaching aids and qualified teachers, thus serving as a model for other high schools in the district and drawing resident students from the areas where particular electives are not available. By 1970 every district headquarters will develop its high school to this level.

25. The teaching of science and mathematics will also receive the strongest possible emphasis during the Third Plan. The quality of education at the secondary level in these subjects, is considered to be deficient by those qualified to make a judgment on the point. This matter needs immediate and urgent attention. The Third Plan will seek to improve the quality of instruction in these subjects, by the provision of up-to-date laboratories, science equipment and books.

26. The main problem here again is the dearth of suitably educated and trained teachers of science and diversified electives. Some suitable measures to solve this problem are indicated in paragraph 36 below.

27. The on-going scheme of 'Pilot' secondary schools will be extended with a view to including new schools and strengthening those which are already in the process of development during the Second Plan. This scheme aims at developing a selected number of schools with an expanded and diversified curriculum to serve as model for others.

28. Assistance will be given to the existing residential schools to extend their facilities and to improve the quality of their instruction. A limited number of new residential schools might come up if justified by public and professional demand.

29. The introduction of quality instruction in science, and diversified electives is not the only form of improvement needed in the existing secondary schools. In very many schools the existing facilities are totally inadequate. These need close study and analysis by the education authorities. Above all there is serious shortage of library amenities. Stocks of books are small and out-of-date. Side reading materials and juvenile literature of appropriate quality is conspicuous by its absence. There is little regular flow of appropriate literature suitable for the needs of the age group concerned or their teachers. During the Third Plan vigorous efforts will be made to correct this serious lack. Regular, fully qualified class teachers should be induced to take training in librarianship during vacations.

30. A very important feature of all these programmes, whose keynote is diversity and choice, is the development of an effective guidance system to assist children in making suitable decisions. This guidance and counselling programme will be based on the use of standardized tests of intelligence, interest and aptitudes, stratified for different age and grade level children and young people. This programme will assist pupils in making correct choices of subjects for study or in seeking opening for employment.

31. Effective improvement of existing higher secondary schools or intermediate colleges in respect of laboratories, scientific equipment and

literature, libraries, reading rooms, residential accommodation and teaching staff has to be undertaken immediately. Although the opening of a few more higher secondary schools will be desirable, the concern in the Third Plan in the total secondary scene will be on consolidation.

Teacher Education:

32. It is a commonplace that no educational system is better than its average teacher. The improvement and expansion of the school system depends squarely upon the quality and quantity of the teachers. If education is to play an effective role in the social and economic growth of the nation, the teacher and his education must receive the highest priority.

33. The level of teaching in our primary and secondary schools is not always as high as might be wished. As the number of the teachers increases to meet the rapid growth of enrolment, the standard of instruction will tend to be depressed still further. During the course of the Third Plan, the number of primary teachers must rise from approximately 184,000 in 1965 to at least 300,000 in 1970. The magnitude of the task can be judged from the fact that in 1970 the number of teachers required to be trained will be twice as many as in 1965. Teachers for Classes VI—VIII and for secondary education in general will number 40,000 for new programmes alone. Among these, moreover, there must be considerable proportion of graduate and other teachers of science subjects, and specialists in industrial arts, agriculture, home economics and business education. But there must not only be more teachers. They must be better teachers. Poor teaching at the primary level is a major factor in the high rate of dropout. At the secondary level it is responsible for the poor quality of many college students and the high failure rate in examinations. Unless steps are taken to increase the quality as well as the number of teachers, the great educational breakthrough made possible by the increased allocations of the Third Plan, will be a breakthrough in numbers only, which might well constitute a drag on the economy.

34. The conventional approach of multiplying the existing type of teacher training institutions, in particular the Primary Training Institutes or Normal Schools, will not do, especially when their current syllabi and other facilities conducive to quality instruction leave a great deal to be desired. Some new institutions will be essential in order to set a high standard which will serve as an example to existing institutions. These new institutions will also be necessary to create capacity for meeting regular annual requirements of teacher supply during the Perspective Plan after the current bulge in demand has levelled out in course of time.

35. The long-term objective is to raise the educational and training qualifications of primary school teachers. During the Third Plan, how-

ever, it will only be possible to produce the number of teachers required, as well as to raise their quality, by such means as the following :—

(i) A corps of 5,000 "teachers of teachers" will be trained, mostly at the Institutes of Education and Research at Dacca and Lahore, during the Plan period, about half of which will be with specialization in primary education. A substantial number of these will be employed in manning the faculties of the Primary Teachers Training Institutes and Normal Schools.

(ii) Some of the best Primary Teachers Training Institutes and Normal Schools will be carefully selected for expansion with a view to doubling or tripling their annual output of trained teachers. This would require expansion in academic and residential accommodation, libraries and other facilities.

(iii) The current syllabi of these institutions will be overhauled, with a view to incorporate in them the latest professional knowledge. Care must be taken that special emphasis is laid on instruction in the psychology of the particular age group of children that will be entrusted to them, on laws of learning and on the use of psychology in a school situation. Improvements in syllabi should be a continuous process and their annual evaluation should be built into the system.

(iv) A vigorous programme of in-service training will be initiated, for the existing teachers. The Education Departments should make determined efforts to make arrangements for these teachers to attend specially designed courses for a period of 3 months, preferably in two successive years. During the interval they will work in schools under supervision of the master teachers. These courses will be conducted by faculties drawn from the corps of "teachers of teachers". Successful completion of the in-service training should be accompanied by suitable increments in salary. No building programme is contemplated for this enterprise. The activity could be located at existing educational buildings, particularly during Summer Vacations, with part of the programme overlapping the term time of these institutions if necessary. Care should be taken to expose these teachers to latest knowledge both in subject matter disciplines and professional areas, especially such subjects as mentioned in Section (iii) above.

(v) The subject of Education will be introduced as an elective at the Intermediate or Higher Secondary stage of studies.

36. The following steps will have to be taken to satisfy the demand for secondary school teachers :—

(i) Every University must realise its responsibility for the most important task of providing teachers for secondary level of education, fully equipped in quality and substantial in numbers. The Training Colleges need special attention and support.

(ii) Education should be introduced as a regular elective subject at the undergraduate level. The programmes of study for B. Ed. and B.A. Hons. in Education degrees should be suitably expanded.

(iii) The syllabi of B.Ed. and B.A. Hons. in Education degree should be closely scrutinzed with a view to incorporate the latest knowledge in professional areas of work. The process should be a continuing one and annual evaluation of the contents of syllabi should be a regular feature of the system.

(iv) By the end of the Third Plan period all Teachers Training Colleges would be staffed by persons specially trained for the purpose, either at the Institutes of Education and Research or overseas. Those of the corps of "Teachers of Teachers" specializing in secondary education, produced by the Institutes, should be fully and appropriately utilized both by the B.Ed. programmes and B.A. Hons. in Education, as well as institutions where Education is introduced as an elective subject at the undergraduate or Intermediate stage of studies.

(v) It is recognized that the teacher is always a student. In order to promote the continued professional education of secondary school teachers, Education Extension Centres will be greatly strengthened. Courses offered by them currently are considered too short in duration to achieve suitable and lasting effects. It is considered that their courses should normally be of 3 months' duration, and that their programmes should have close co-ordination and articulation with the syllabi of the Institutes of Education and Research, so that some of the credits obtained at the Education Extension Centres might count towards the work of the degrees of the Institutes. The Extension Centres will have to be staffed appropriately for the purpose. In-service training for the teachers of secondary schools should be compulsory, they may be required to go for at least a 3-months' course at institutions like the Extension Centres, at least once in 5 years.

(vi) Teachers should be encouraged by all manner of means to improve themselves professionally. Such professional improvement should be accompanied by suitable increments in salary. Some of them should be sent on duty to the Institutes to work for a degree.

(vii) Teachers of pre-vocational subjects at the middle|Junior High stage and diversified courses at the secondary stage are in short supply. Special measure need be undertaken to increase the supply immediately as the development of comprehensive schools is one of the major objectives of the Third Plan. The Institutes of Education and Research have programmes for the training of teachers of teachers in Industrial Arts and Business Education at the Masters degree level. These facilities should be immediately expanded, and their product should be utilized to man the faculties of Technical Teachers Training Institutions and the Polytechnics. The Agricultural Universities and Colleges, and Colleges of Home Economics should undertake the responsibility for the training of teachers in their respective subjects.

(viii) There is a critical shortage of teachers of science subjects. For this purpose facilities for teaching of science at higher secondary stage, which is considered to be real bottleneck here, will have to be greatly expanded and improved. Similar steps have also to be undertaken at college and university levels. A special scheme of scholarships ought to be initiated to support through intermediate and degree institutions those science students who offer to serve as teachers after B.Sc. and B. Ed. Measures will also be essential to ensure that the quality of science teaching is raised. It will be necessary to expose science teachers, both pre-service and in-service, to the newest methods and concepts of science and science teaching. As scientific knowledge is expanding very rapidly, and with it the techniques of scientific investigation, it is essential that science curricula should be subject to constant review and revision. It is equally essential that teachers should be kept closely in touch with these developments.

(ix) It is also necessary that teachers at higher secondary stage should have substantial exposure to professional areas of education besides their subject matter specialization and an appropriate professional training programme should be evolved for them.

37. The Institutes of Education and Research play a very important role in the promotion of virtually every aspect of teacher education. Upon them depends in large measure the emergence of the key group of educational specialists who can transform a neglected and somewhat inert segment of the educational system. They are particularly significant in their capacity to relate one level of education to another, to be a part of the university structure and at the same time involved with the schools ; and to prepare persons specialized both in primary and secondary education. They are pioneers in the field of Educational Research both basic and applied. The two Institutes at Dacca and Lahore, will be more fully and effectively utilized for post-graduate education. They will be encouraged to develop doctoral programmes as soon as

possible. Their Research activities will be further expanded, intensified and supported. In research high priority is to be accorded to the development and standardization of objective tests, such as those of intelligence, and scholastic achievement in various subjects, stratified for different age and grade level children, besides a battery of aptitude tests. In view of the fact that the products of the Institutes of Education and Research will be in very great demand to create the revolution in quality which is essential to educational system, it will be necessary that two more Institutes, one in each Province, be set up at some stage during the Third Plan. These Institutes should have a high degree of autonomy under Boards of Governors.

Technical Education

38. Technical Education is of vital importance in a developing country, and the Second Plan assigned a high priority to it. The Third Plan envisages a much larger programme in technical education both in size and range. It is imperative that a major breakthrough be achieved at all levels of technical education during the Third Plan. This will constitute a necessary shift from traditional subjects of study to practical and essential skills. Without this, the country's long-term social and economic objectives will founder for lack of the skilled personnel needed to carry out the great variety of tasks upon which development depends.

39. The two Engineering Universities at Dacca and Lahore will be developed for the promotion of post-graduate studies and research. In East Pakistan, in addition to the completion of the Engineering Colleges at Rajshahi and Chittagong, an Engineering College at Khulna will be established. In West Pakistan, the Engineering Colleges at Karachi and Peshawar will be strengthened, the Engineering College at Hyderabad will be completed and another new Engineering College will be established. The programme is so designed as to increase the annual intake capacity of the Engineering Colleges (including the Engineering Universities) from 1,330 in 1965 (480 in East Pakistan and 850 in West Pakistan) to 3,000 in 1970 (1,500 in East Pakistan and 1,500 in West Pakistan). The total output of engineers during the period 1965—70 will, however, be about 5,000 (2,000 in East Pakistan and 3,000 in West Pakistan).

40. The existing capacity of the Polytechnic and Technical Institutes for the training of technicians will be expanded and no fewer than 12 new Polytechnic Institutes will be established in each Province to provide courses in various technical subjects including technologies not now taught. It is estimated that the annual intake capacity of the Polytechnic and Technical Institutes will increase from 4,100 in 1965 (1,900 in East Pakistan and 2,200 in West Pakistan) to 14,000 in 1970 (7,000 in East Pakistan and 7,000 in West Pakistan). The total output of technicians during 1965—70 will, however, be 23,000 (11,000 in East Pakistan and

12,000 in West Pakistan). For these graduates of Polytechnics and other Technical Institutions practical training in life-like situations is highly necessary. In future, therefore, greater emphasis will be given to practical training, preferably in co-operation with private agencies, as an integral part of the curriculum. For this purpose it would be desirable to set up Advisory Committees for each Polytechnic, on which industry and other employing authorities should be fully represented.

41. The Second Plan provided for establishing a number of commercial institutes in both the Provinces in order to meet the demand for trained personnel in office skills and in shorthand, typography, book-keeping, transport, marketing, costing and similar subjects. The number of such institutes is expected to be 16 in East Pakistan and 21 in West Pakistan by 1965. The possibility of establishing these commercial institutes as departments of Polytechnics rather than proliferating these institutions separately will be explored. The institutes, whether established as independent organisations or placed in polytechnics, will need consolidation and expansion during the Third Plan.

42. Here again, as at other levels of education, considerations of quality should receive high priority and every conceivable step should be taken for the purpose. It is necessary to reiterate that maintaining high standards would require high quality teachers. It has been stated that good teachers are in short supply at the polytechnic level. This needs to be attended to vigorously during the Third Plan. The teachers at the polytechnic stage, besides possessing high quality skills in their specialization, should also have broad educational and professional preparation.

43. Vocational training to produce skilled workers has so far been the responsibility of the Labour and the Industries Departments. The Education Department in East Pakistan, however, has recently taken over the entire responsibility for running vocational schools. These schools are in addition to the technical training centres being run by the Labour Department. In West Pakistan, trade-craft courses are still being provided mostly by the Labour and Industries Department. It is proposed to take over the vocational schools from the Industries Department and to improve and expand them. Some vocational schools as pilot projects will be opened by the Education Department in West Pakistan during the Third Plan period. It is expected that the annual intake capacity of the vocational schools and Polytechnic Technical Institutes (where craft courses are also being introduced) will increase from 8,300 in 1965 (3,300 in East Pakistan and 5,000 in West Pakistan) to 50,000 in 1970 (25,000 in East Pakistan and 25,000 in West Pakistan). The total output of craftsmen will be about 110,000 (50,000 in East Pakistan and 60,000 in West Pakistan) during 1965-70. In addition there will be skilled personnel

produced by the technical training centres under the Labour Department and the various industrial establishments and private concerns which provide informal or on-the-job training.

44. One of the main problems of education at the trade/craft level is that responsibility is dispersed among so many agencies. Steps have been taken during the Second Plan to co-ordinate and systematise some of this training, but the situation still leaves much to be desired. Types and standards vary and there is little comparability of qualifications and little relationship between the training carried out by various agencies and national manpower requirements. During the Third Plan, efforts will be made to streamline the administrative framework responsible for craft training. Some training, however, is more suitably carried out by private industry than in government institutions. Industry should therefore be encouraged by various incentives to engage in in-service training of employees. Where appropriate, the qualifications obtained from this training should be standardized. The number of persons trained in this way, and by Departments of Labour, will considerably increase the figures given in paragraph 43. The development of craft and trade training should be in direct conformity with the country's need for skilled labour of various types.

45. Programmes of instruction in the evening will be greatly emphasized in the Third Plan, for the benefit of those who are working during the day. Polytechnics, Technical Training Institutes, Vocational Schools and Commercial Institutes will all start or expand their evening classes so that those who cannot enrol on a whole time basis are enabled to earn certificates/diplomas by attending evening classes.

46. Needs of the rural areas are to receive special attention in many ways during the Third Plan. The skills of workers and craftsmen in the remote villages and rural areas are of low calibre and have to be upgraded. One way in which this can be done is to institute a system of mobile workshops on wheels, suitably equipped and manned, which should travel from place to place with halts of various duration at different places, where they should provide informal or on-the-job training to the rural skilled, semi-skilled or unskilled craftsmen. Organisations such as this can best be the responsibility of either Polytechnics or Vocational Schools. In this way these institutions can start having an impact on the rural communities. Details will be worked out and concrete schemes formulated.

Higher Education :

47. It is to the institutions of higher learning that the country looks for leadership in various walks of national life. It is a cause of considerable satisfaction that Pakistan, so poorly supplied with facilities for higher

education during the early years of independence, has been able to make so much progress in this field. This is largely due to the important place assigned to higher education in the First and Second Plans.

48. But education at this level still has two major failings. The first is that the proportion of science and technology graduates is far too low for the country's needs ; the second is that the quality of academic achievement leaves a great deal to be desired. Therefore, although some expansion of places in higher education will be necessary during the Third Plan, greater emphasis will be laid on improving the quality of existing institutions, and on expanding and strengthening the teaching of science and other technological subjects that are of direct relevance to Pakistan's development effort.

A—Colleges :

49. The quality of colleges in Pakistan and the facilities they provide are very uneven. Some institutions are undoubtedly very good and enjoy high repute and prestige. But generally speaking the courses of instruction could well be lengthened and academic facilities improved. Some colleges are inordinately crowded, many do not possess adequate libraries, laboratories or study rooms for students and staff. In such colleges teachers have little opportunity or incentive to carry out personal study or research. The faculties are not as highly qualified as might be desired ; and facilities for instruction in science are either non-existing or extremely limited.

50. In view of the number of institutions involved, measures to improve colleges have to be taken selectively. Resources will be made available to the soundest institutions to build up their amenities. The majority of students enrol in non-science subjects and most institutions concentrate on them because of the high cost of science teaching and paucity of teachers. Major efforts in the Third Plan will be directed towards improving and expanding facilities for the teaching of scientific disciplines. Laboratories will be added to and modernized. Up to date science apparatus, equipment, books and periodical research literature will be provided. Teachers of science subjects will be provided every opportunity to improve themselves professionally. Adequate number of foreign training facilities and scholarships will be made available to them to study in selected universities overseas. Opportunities for vacation and evening courses at the Universities will be arranged. Substantial scholarship inducements to students to take courses in science and developmentally relevant subjects will be offered.

51. Libraries in many colleges are in a sad state. The library is recognized as the heart of an educational institution. Major efforts are necessary to improve libraries. Open shelf system should be immediately introduced. There ought to be sufficient individual places in the libraries

or attached study halls for the students to sit undisturbed and pursue their enquiries. Libraries and study halls should be available to students till late in the night long after the college working hours. Time has now arrived when air-conditioning is demanded by institutions of higher learning. Libraries and study halls should be the first to be air-conditioned.

52. Most colleges are currently short of residential accommodation. Hostels will be provided where they are needed. The crowded colleges would need some additional accommodation, together with necessary staff and other amenities. But in some cases the solution of the problem lies clearly in setting a limit to the total number of students; for standards tend to be diluted if unplanned increases in enrolment are allowed.

53. In some colleges studies upto Honours Courses will be established. Some colleges that attain excellent standards will be developed into potential university centres. Due attention has to be paid to tutorials, individual supervision and guidance, periodic tests and internal but objective evaluation of student achievement.

B—Universities :

54. Improvement of quality, expansion of facilities for study and research in scientific and technological disciplines and consolidation in general will be the keynotes of the development of universities in the Third Plan. Striving for excellence must permeate every aspect of university work. It is essential that post-graduate study and research should be strengthened considerably with a view squarely to take the end-product of a university to the frontiers of knowledge in the chosen subjects of study and produce creative thinkers.

55. In order to achieve this, all those measures listed under colleges will apply to universities as well, and more. Libraries and laboratories will be improved in the manner indicated earlier. It is here that the improvement and expansion of facilities for scientific and technological disciplines will receive the strongest emphasis. Universities should be encouraged to aim at immediate enlargement of the proportion of students pursuing advanced courses and research in these subjects.

56. Institutes of Applied Research will be established in some universities. The main objective of these institutes will be to serve the country by studies of matters clearly related to the needs of the development programmes. Universities will co-operate with each other and with the wider academic world in the prosecution of these researches. In a number of cases development-oriented research requires the collaboration of workers in several disciplines. The Institutes of Applied Research will provide an appropriate setting for multi-disciplinary research and studies.

57. It has been generally accepted that the system of affiliation is not conducive to good education, and that the number of colleges affiliated to a distant university should be restricted. It is desirable, therefore, eventually to establish a few more universities of the unitary type, making it possible for the teachers to give a more effective education to their students. In order to prepare the ground for the establishment of such universities subsequently, some of the good existing colleges have to be developed as potential university centres during the Third Plan.

58. At this level, more than any place else, the quality considerations dictate that closest possible attention be devoted to individual supervision, tutorials and seminar discussions, encouragement of critical and scientific thinking and zeal for enquiry, periodic tests and objective evaluation of student achievement. In fact universities have to take increasingly bold and imaginative measures to improve quality of instruction. While doing so, some of the traditional procedures and practices that hamstring progress in this direction will have to be abandoned.

59. The effectiveness of all these measures, however, depends entirely on the competence of university teachers themselves. Every possible step must be taken to attract the best qualified teachers to the universities, to keep them there and to ensure that they have the means to continue their studies and research. Provision is made in the Plan for several steps conducive to this end. Research facilities of all sorts should be improved. The staff of departments should be increased in order to reduce teaching loads and to give more time to personal study. Scholarships and foreign training facilities, especially in science subjects, should be freely available. Provision should be made for periodical study leave. A certain number of additional or associate professorships, readerships and fellowships should be established to which eminent young scholars may be appointed in accordance with their merit rather than seniority in service. Universities must aim at recruitment of scholars for their faculties who have creative ability. They may have to talent scout for the purpose, offer financial and other incentives and suitably honour and reward creative work.

60. Duplication of highly specialized areas of study and research should, as far as possible, be avoided, especially within each Province. Certain highly specialized disciplines, especially in science, require very costly equipment and highly trained staff. When the number of students is small, it would be more conducive to efficiency if the universities decide to identify and divide such areas of study. For co-operation such as this and for other purposes, the Inter-University Board should be activated to undertake fuller responsibilities. The Inter-University Board should aim at more effective co-ordination and a system of fraternal academic affiliation between the universities within the country and

between our universities and other universities abroad, especially neighbouring countries like Iran and Turkey and others in the Afro-Asian region or farther west.

61. For better co-ordination of university education and systematization of government aid, it is necessary that a high powered University Grants Commission should be immediately established.

Scholarships :

62. The Second Plan provided for the introduction of a comprehensive system of merit scholarships for talented students at all levels beyond the stage of free primary education. These scholarships are awarded on merit on the completion of classes V, VIII, X, XII and at the college| university level. These schemes of scholarships will be further expanded and supported during the Third Plan period. The purpose of the programme is to open up every career to students with talent irrespective of their socio-economic background. In a country which has not yet enough resources to provide free education at all levels, the merit scholarships programme is an important method of securing equality of opportunity and social mobility.

63. Special scholarship schemes will be established in order to encourage science education from Class VI right up to the post-graduate level, with a view to motivate a majority of students to pursue subjects in the basic sciences, rather than in traditional studies. Similarly, special scholarships are to be instituted for girl students at all levels of education with a view to boosting Female education.

64. The Third Plan will also include a systematic and well-co-ordinated programme of foreign training of teaching staff. In addition students of outstanding merit will be selected at the completion of their degree courses or post-graduate studies and sent abroad to carefully selected universities for further specialization in their respective disciplines in order to serve the teaching profession on return.

65. The on-going scheme of scholarships for the children of Class II, III and IV employees of the Central Government will continue to be supported and will be expanded.

Adult Education :

66. The high rate of adult illiteracy and the realization that it places tremendous barriers in the way of economic, social and political progress, have in the past prompted many efforts towards adult education.

These efforts, generally speaking, were unrelated to the economic and practical needs of illiterate adults and tended to restrict themselves to mere literacy. Bearing in mind the massive size of the illiterate population, the failure to achieve results of any significance is not surprising.

67. The problem is staggering in its magnitude and nebulous in nature. It could well engage the total physical and financial resources of the education sector without being satisfactorily solved. It has, therefore, to be handled with circumspection, a sense of realism and well thought out strategy. While directing an effort in this direction certain basic premises have to be kept squarely in mind. The education departments cannot take responsibility for a vast enterprise, for as it is they are hard put to it to look after formal education activity. Secondly adult literacy is not enough by any manner of means. Any fruitful undertaking in this field has also to aim at adult education. Mere ability to read and write is of minimal value unless there is worthwhile material on which to exercise it, and literacy unguided by education does not engender increased productivity or improved social behaviour. Thirdly, in consequence, large scale production of reading materials in simple language related to the vocational and every day needs of adult literates is necessary, if education at this level is to produce worthwhile social and economic results. The literate adult should be able to lay his hands upon simple manuals connected with his work or other materials related to his needs and problems. Fourthly efforts should be concentrated in the first instance on those segments of the labour force where education would pay the highest dividends. These would consist mainly of industrial and craft workers and agriculturists in certain selected rural areas. The range of effort in adult education will be steadily widened.

68. During the Third Plan period Bureaus of Adult Education will be set up in Departments of Education in the two Provinces. They will not be responsible directly for teaching, but will liase with Basic Democracies, the proposed rural social welfare programmes, urban community development programmes and with voluntary agencies which engage or might engage in adult education. The Bureaus will offer technical guidance and knowledge for the preparation of materials, and may in some cases decide to extend subsidies to agencies. The Bureaus will collaborate with Directorates of Technical and General Education in evolving appropriate literacy courses and useful manuals for illiterate adults who are employed in industry.

Promotion of the Arts, Culture and Sports :

69. Arts and cultural centres such as museums, art gallaries, national monuments, libraries, music centres, are the media through which the cultural advancement of a country is reflected. These centres, if developed as living organic institutions and run on efficient basis can have

great educative value, as it is through them that the younger generations of a nation can be informed of their national achievements and heritage. Sports, too, play an important role in developing healthy habits and desirable attitudes.

70. In the past some attention has been given to the development of social and cultural centres as well as to the development of sports. Importance of these activities is being increasingly recognised now and steps are being taken to systematically develop the cultural centres and organise sports activities both on regional and national basis. Compared to previous Plans it is expected that the programmes in these spheres in the Third Plan will be much larger in size and more varied in nature. It is expected that private organizations supplemented by continued Government support will ensure the development of these activities at an appropriate scale.

National awareness :

71. Some projects of national importance have been identified and given due emphasis in the proposed programme for the Third Plan. The on-going projects at Islamabad, namely, the establishment of a University and a National Museum, a National Library, an Art Council and National Archives of Pakistan, will be completed during the Third Plan period. The work of the two Boards for the development of Urdu and Bengali languages will be continued and deficiencies in scientific and technical literature will be removed through translation and original publications. The activities of the Central Bureau of Education and the Central Statistical Office will be expanded and improved. Provision has been made for summer seminars for the teachers of colleges and universities to familiarize them with the latest techniques of teaching and developments in their fields of specialisation. A number of outstanding Pakistani scholars studying or working abroad will be selected and posted as National Research Scholars in different Pakistani Universities. The Islamic Research Institute will be developed as envisaged in the new Constitution. Provisions have also been made for grants to various national bodies, cultural organisations and national educational institutions. The educational requirements of Azad Kashmir and Northern Areas will receive adequate attention.

Miscellaneous :

A—*Female Education*

72. It has been estimated that in the last year of the Second Plan period the ratio of female to male students is 1 : 3, 1 : 6 and 1 : 7 at primary, secondary and higher education levels respectively. The incidence of illiteracy in the female population has been found by the

census of 1961 to be much higher than that in the male population. The situation is highly unsatisfactory, and will have a serious long term effect on Pakistan's social and economic development. The nation can ill afford to neglet the education of half of its population.

73. Inducements, in the shape of sizeable scholarship programmes for girls, have been indicated in the relevant section. But the problem cannot be entirely solved through these measures. It stems from deep-seated social attitudes and will only yield to equally radical changes. Leadership of the highest calibre and unremitting efforts will be required to meet this national challenge. The education departments and professional educators will have to enlist the co-operation of women's organizations in the country like APWA, and the Federation of University Women and other social and humanitarian workers and rural and urban community development organizations, for the purpose. It has been suggested that eventually all primary schools, boys' and girls' alike, should be staffed with women teachers with appropriate education and training. It has also been suggested that schools at the primary level should be common for boys and girls. These are issues that have to be raised and answered during the next few years.

B—*Rote-Memory and Learning*

74. The nation's education at all levels is still plagued with practices that lead to memorization of factual data rather than real learning. Educators are fully conscious of the gravity of the issue. The Report of the Commission on National Education (1959) has suggested several devices that could be conducive to the eradication of this defect. But the matter requires a radical change in what goes on in a class room. Every teacher from primary to college, will have to make conscious efforts and the teaching-learning situations in the classroom will have to be basically reformed. This re-emphasizes the improvement of the teacher. Real learning is not something that the teacher can hand over to a pupil or do for him. It involves the whole pupil, his perceiving, thinking, feeling and doing. It is based upon his past experiences, present readiness and future goals and purposes. The real criterion of learning is change in behaviour.

75. These considerations clearly indicate that the educational authorities should determinedly take stock of the existing situation and evolve comprehensive schemes to bring about the desired revolution in the classroom practices and procedures.

76. The examination system reflects the prevalent methods of teaching and learning. The value and appropriateness of the current examination system has already been questioned. Unfair practices have been mounting during the last decade. This archaic system is conducive to laziness of the pupils over lengthy periods of time, is expensive and is known to encourage memorization.

77. Early development of objective standardized tests of scholastic achievement for various subjects and classes has been urged in the relevant section. But the whole question of student evaluation has to be subjected to close and scientific study, alongwith its essential implications for school and college practices and teacher preparation. Increased reliance and trust has to be placed on the teacher, who in his turn has to shoulder more responsibility. The Education Departments of the two Provinces will study these questions scientifically.

C—*Curriculum Development*

78. Frequent references to curriculum development have been made in relevant sections. This is an important professional concern and should engage serious attention. Curriculum is not something rigid, fixed and immutable. Nor is a single pattern curriculum suitable for all types of children living in various social environments and coming from different socio-economic backgrounds. The curriculum has to be child centred. Individual differences are to be identified and catered for. The pupil has to be motivated to learn. The pupil as a whole has to be involved in the learning processes. The curriculum of separate subjects would be inefficient if it did not enable the pupils to use the knowledge gained or if it did not help them to relate themselves to their world and to solve the problems of living. At the same time a curriculum of integrated subjects would be inefficient if it did not ensure development of skills and use of factual data.

79. Some organizations for curriculum development are in the making. But it would be a mistake to divorce a continuing activity like this from the teacher training institutions. Research and experimentation in curriculum development should be a regular responsibility of all training colleges, Institutes of Education, and Primary Teacher Training Institutes|Normal Schools, together with schools and colleges themselves. The initiative of the teacher, or teacher trainer, and experimentation and change in curricular matters is to be encouraged and sought after. The Education Departments will develop schemes with a view to initiate or intensify their efforts.

D—*Audio-Visual Aids and other new Teaching Devices.*

80. The value of audio-visual aids of various types is fully recognized. Use of maps, charts, illustrations, pictorial or model representations, films, film strips and other projected materials are a great help in real learning processes. Some institutions are currently making effective use of certain simple devices. But it is necessary that a massive and comprehensive effort be mounted so that all educational institutions are induced and enabled to use the available audio-visual materials.

81. The Education Departments should develop appropriate and practicable schemes for which financial support would be forthcoming. It is essential here to mention that a feeling has grown to the effect that

audio-visual aids are expensive luxuries. But most of the visual aids can be obtained cheaply, or if not they can be copied or improvised with little expense with local materials. Only the skills and the will to make the effort are needed. It is, no doubt, true that some projection apparatus is, costly, but one film or film-strip projector or overhead projector can be used by many schools jointly. Similarly one film library well stocked with appropriate films, film-strips, slides, etc., can service a whole series of schools and colleges. Moreover a large variety of films and films strips on topics of science and mathematics and series of graded lessons on physical and natural sciences and mathematics, and documentaries of all types, for use of pupils at different levels of the educational ladder, are easily and cheaply available from abroad and these can be used right-away. Only films on social sciences or other cultural subjects will have to be developed within the country.

82. School broadcasts have existed for some years but are still extremely limited in scope and time. This is a grave desideratum, for radio receiving sets are or could be widely available in schools and homes, in urban and rural communities alike. Immediate steps ought to be taken to develop educational broadcasts, appropriate for classroom use as well as those for individual or group listening.

83. It is expected that Television will be started in the country during the Third Plan period. This could be a tremendously powerful instrument for education, if educational programmes are given their due priority. The need for the special training of Radio and Television teachers is, however, recognized.

84. The country is also lagging in new devices for use of learning processes. It is necessary that programmed instruction and materials in many subjects and for different levels, be quickly developed in the country. Another device of great potential value is that of team teaching. Experiments in the adaptation of this technique to local conditions should be carried out.

E—*Physical Education*

85. A person develops as a whole and education cannot be confined to mental and intellectual improvement. Socio-emotional needs of children and youth have to be identified and catered for at different levels in an appropriate manner. In particular physical education has to receive its due attention.

86. Physical education of youth has long suffered neglect. But during the Second Plan period it has attracted some effort. These efforts are to be intensified during the Third Plan. Simple rules for health and personal hygiene should be taught in early childhood. Special courses and experiences are to be devised keeping in view the

requirements at specific growth levels of children and youth. Above all it is necessary that at secondary, higher secondary, college and university levels maximum possible facilities should be provided to both male and female students to play games and engage in physical sports in accordance with their inclinations and capacities.

87. Currently our educational institutions suffer from lack of suitable facilities for the purpose. Playgrounds should be made available wherever possible. In congested urban localities gymnasia are more easily possible. Swimming pools could also be available especially in co-operation with communities. It is recognized that provision of more space is costly and on occasion very difficult. But many games and sports really do not require very much of space or costly sports gear. Basketball, volleyball, badminton and squash are examples. Indoor gymansia can furnish many types of sports.

88. Regular physical exercise is considered a sound and basic part of educational responsibility. It is very important that the maximum number of enrolled students, if not all, should regularly have some type of suitable physical exercise followed by a shower and brush up. Schemes for new or improved institutions should contain provision for appropriate facilities for sport.

F—*Juvenile Literature*

89. Reading materials available to students at all levels of education are currently very limited. Most students are left with officially prescribed text books alone. These text books themselves need improvement and modernization. But besides these a student should have easy access to a wide range of attractive and interesting reading materials.

90. Whatever books for children are extant, are written by adults guessing at children's language and concepts. Vocabulary lists stratified for various age and grade level children have not yet been scientifically formulated, in any language in the country. Research required to produce these lists should be undertaken immediately, for it is on the basis of these graded lists of vocabulary that juvenile literature can be produced.

91. Production of such literature is a very specialized job. Schemes aiming at the improved and increased production of such literature should be prepared.

G—*Rural and Backward Areas*

92. Abridgment of the developmental gap between urban and rural communities is important for the overall educational development of the nation. The pronounced hiatus between their respective facilities for

education and consequent supply of skilled persons has to be closed. It is therefore necessary that not only officially defined backward areas but rural communities in general in both Provinces should receive special attention in the provision of appropriate facilities. Special assistance is to be given to such communities, particularly for primary education. Talent in rural communities is to be spotted and the scheme of merit scholarships is to be activated to ensure that deserving children and young people are helped to go up to the highest rung of the educational ladder in accordance with their interests, aptitudes and deserts.

H—*Education, Trained Manpower and Economic Development.*

93. A constantly recurring theme of the education programme for the Third Plan is the need to gear education to the needs of the country's developing economy. This is a complex task requiring, if it is to be carried out with the greatest effect, a considerable understanding of the socio-technical role of education in creating conditions within which economic growth occurs, as well as an accurate analysis of the present and projected supply of skilled labour and of the outputs of the educational system.

94. During the Third Plan projections will be made of the numbers, levels of education (primary, secondary, college, etc.,), and area (technological, non-technological) of skilled labour needed to meet the requirements of the Third Plan and the Perspective Plan as a whole. The output of the educational system will be estimated, and the changes necessary in order to meet the manpower requirements will be calculated. At the same time a more general analysis of the role of education in the development of Pakistan, social and political as well as economic, will be carried out.

CHAPTER 15

PHYSICAL PLANNING AND HOUSING

The physical planning and housing sector deals with the planning and development of physical environment essential for the promotion and development of community life in urban and rural areas. The task is to translate the national social and economic objectives into real human and community gains through physical planning. Timely and proper physical planning of land use, transport and utilities, houses, community buildings and services can help create attractive, functional and productive villages, towns and regions, thus protecting and enhancing human life as well as national economy.

I. PROGRESS UNDER THE FIRST AND SECOND PLANS

2. The First Five-Year Plan (1955—60) was the first effort to attack the problem of urban and rural housing in some organized manner. The Plan allocated Rs. 861 million in the public sector for town-planning, housing, watersupply and sanitation. Because of various administrative and organizational difficulties, only limited objectives were achieved. Some progress was made in construction of Government offices and buildings and houses for Government servants and upper income groups and housing facilities were provided to some of the shelterless refugees.

3. The Second Plan allocated Rs. 1,885 million in the Government financed sector for the urgent needs of physical planning and housing. The plan assigned priority to the Basic Development Programme which included the organization of services for housing, preparation of city and regional plans, planning surveys and legislation, education and training in architecture, town-planning, and the building trades. Some progress has been achieved in these fields. Some initial reorganization has been achieved for physical planning and Housing services in both the Provinces; plans for eight important towns have been prepared; building research institutes at Lahore and Dacca have been initiated; Departments of Architecture at Technical Universities at Lahore and Dacca have been established and some work for preparation of city and regional planning legislation has been initiated.

4. The Plan allocated Rs. 850 million for housing. The first priority in housing was given to refugee rehabilitation. It was envisaged that 300,000 residential plots would be developed and part of the shelterless refugee families would be settled in nucleus houses while others would be allocated developed plots. Subsequently, when it was found that most of the refugees had little means to construct their own houses, it was decided to build more nucleus houses. As a result of this change in policy the physical target could not be achieved. It is expected that a total number of 150,000 plots will be developed by the end of the Plan period, thus leaving a balance of 150,000 plots to be carried over to the Third Plan period.

5. Substantial progress was made with respect to rural watersupply and sanitation in both the Wings ; but the urban watersupply and sewerage programmes have not progressed very satisfactorily except at Karachi, Dacca, Chittagong and a few small towns in both the Wings. The establishment of a Department of Public Health Engineering in West Pakistan and initiation of Chittagong and Dacca Water and Sewerage Authorities are important land marks in the progress of physical planning.

6. Good progress was also made in the housing of Government servants, construction of Government buildings and offices and the new Capitals at Islamabad and Dacca. At Islamabad and Dacca work has been carried out to the extent of Rs. 100 million and Rs. 35 million respectively over the Plan allocations. In case of local bodies and Improvement Trusts although the financial allocations have been exceeded, progress has been haphazard and without a coherent plan. The achievements in the private sector have been impressive in size, but house construction has been mostly limited to upper income groups and standards of neighbourhood and community planning have been poor.

7. To sum up, the Second Five-Year Plan has achieved some of the sectoral objectives but the overall performance has not been of a high order due to organizational difficulties, and absence of co-ordinated city, regional and national planning. The plan has, however, laid some foundations for an organized effort for physical planning and housing during the Third Plan.

II. THE PROBLEM

8. Living conditions in our villages and cities were never very good. Rapid growth of population and a high rate of urbanization outpacing the development of resources and provision of facilities and services, have caused further deterioration. The bulk of the population is poor and cannot own or rent minimum essential shelter or afford minimum amenities. The result is, that we have overcrowding and slums in the cities and depressed living conditions in the rural areas. Absence of a proper approach to the problem of balanced growth of our urban and rural areas and a well defined policy for the location of industries and other economic activities has further aggravated the problems.

9. Lack of appropriate administrative structure on local, regional and provincial levels, lack of data, surveys and legislation for housing, physical planning and land acquisition, extreme shortage of trained physical planners, shortage and mal-distribution of essential building material, and orthodox construction codes and practices pose some serious problems. In rural areas, there are problems of fundamental needs like pure watersupply, drainage and sanitation as well as communication and community services. Very few villages have good water supply systems, surface drainage and proper sanitation facilities. In most cases

surface water and refuse run along unpaved mud paths into open pits. These conditions are conducive to the spread of diseases undermining the health of villagers. Most villages do not have roads for movement within the village or connecting the village with the highways, market centres and centres of education and administration.

10. A fundamental problem besides lack of appropriate administrative structure, is the absence of up-to-date Acts for City and Regional Planning and Housing. Some existing Town Improvement Acts only touch upon the need for Physical Planning but do not define the need, scope and operations for such planning. Although the Second Five-Year Plan made provisions for enacting such legislation, the progress so far is not very encouraging. Due to absence of Physical Planning legislation, our urban areas are growing in a haphazard way and even when the City Plans may be ready, due to absence of these Acts their status will not be fully clear. As regards Housing Acts, no progress has been made at all. So far our housing policy has not been translated into appropriate legislation spelling out in detail the distribution of responsibility between central, provincial and local governments; conditions for loans; grants and subsidies, conditions for condemnation and replacement of sub-standard and unhealthy houses as well as minimum housing standards. Such Housing Acts, which have been enacted in many parts of the world, also clarify procedures for the development of private sector activities such as formation of companies, credits and loans tax concessions and appropriate systems for an accelerated output of dwelling units. The policy for industrial workers housing is still in an embroyanic stage, and industrial slums are growing at a rapid rate. Unfortunately, although the Government has been conscious of the serious housing problem, for a number of years its attention was wholly occupied by the housing needs of the shelterless refugee families. Due to this gigantic problem and extreme shortage of resources, it was not possible to takle the housing problem of the general public except for an extremely modest housing programme for the public servants and low income groups.

11. Although both the First and the Second Plan put a great deal of faith in the private sector for attacking the national housing problem as vigorously as possible, so far the achievements have been extremely limited in low income housing while some modest progress has been achieved in middle and upper income housing. Due to organizational, legal and credit problems, coupled with poor or no profit margins, private enterpreneurs have not been able to make the same contributions that they have made in other sectors of the economy. The House Building Finance Corporation's role has been limited to extension of credit only and that also depending upon availability of assistance from the central government. Besides the H.B.F.C., as yet no other credit or savings institutions have been developed for encouraging housing. The present credit policies are too restrictive for housing credit, and possibilities of long-term loans for house building or large-scale housing enterprises are rather limited.

12. The physical planning and housing problems are intimately related to the area of local government and local development. Procedurally city planning is a part of the local government functions, but so far the focus of responsibility for this work has centred round the Improvement Trusts and Development Authorities. Some of the trusts have been busy mostly in embellishment or improvement schemes which are not integrated into an overall Development Plan, and therefore tend to increase rather than alleviate the problems. The responsibility for public housing is diffused between various departments of provincial government and the local bodies. This has created serious hurdles in an effective and appropriate implementation of whatever modest programmes have been envisioned so far.

13. The First Five-Year Plan estimated that including the problem of shelterless refugee families and the backlog as well as the new needs for 1955—60 ; it had to face a gigantic demand of 25 lakh dwelling units in urban and rural areas. As the problem of shelterless refugees was quite acute, the government accorded priority to their urgent needs along with a modest programme for public servants housing. Due to shortage of resources, a hardcore programme for development of 2,50,000 plots was chalked out, with the intention that the Government would assist in constructing some houses on part of these plots, while rest of the plots would be built upon in the semi-public and private sectors. Unfortunately due to a variety of reasons, the performance of the First Plan was not up to expectations and housing achievements were extremely modest, if not poor.

14. While preparing the Second Plan, it was decided that as the housing problem of rural areas was of a different nature, it should be dealt with separately, and an effort should be made to evaluate the backlog in urban areas only, as precisely as possible within a framework of our own levels and standards of living. As a result of this exercise, it was found that in June 1960, there was a backlog of at least 6 lakh dwelling units in our urban areas. The new needs for 1960—65 were found to be of the order of 5 lakh dwelling units. Accordingly the Second Five-Year Plan had to meet a total need of 11 lakh dwelling units. Unfortunately, as the problem of shelterless refugee families was still not completely solved, it was again decided to accord first priority to refugee and public servants housing, and try to meet some of the most urgent needs of public housing in the public, semi-public and private sectors. An extremely modest programme of developing 300,000 urban plots was formulated, with the intention that part of these plots would be built upon by the Government, and the rest by semi-public and private agencies. It is expected that during the Second Plan period only a maximum of 1,50,000 plots will be developed thus leaving 50% balance of the target as well as the earlier backlog. As such, the total backlog on 30th June 1965 would be 9½ lakh dwelling units. The new needs

during 1965—70 would be at least 6 lakh dwelling units; thus the total requirement of urban dwelling units for the Third Plan period would come up to 15½ lakhs. This is indeed a gigantic demand and due to shortage of resources as well as organizational and manpower difficulties it would not be possible to meet even 50% of these urgent needs. Further details of an appropriate approach and a modest housing programme will be described later.

15. As regards community services and utilities, the water, sewerage and drainage needs of our communities have been substantial. Very few of our 304 urban areas have adequate or protected water supply, drainage and waterborne sewage system. The problems in rural areas are much more serious. Out of 100,000 villages, hardly 30% have some primitive arrangements for water supply. It is expected that by June 1965, as a result of our intensive rural water supply effort, a dent may be made in the problem. Approximately 188 selected rural areas in West Pakistan may be supplied with protected water supply while 1,62,000 hand pumps and tubewells may be provided in rural areas of East Pakistan, still leaving a balance need of 200,000 hand pumps and tubewells. Besides rural water supply, the problem of excreta disposal poses health hazards. A modest programme of introducing a simple cheap rural latrine has been initiated in East Pakistan at a total cost of Rs. 15—20 per latrine. The programme will need to be expanded on a pilot basis in both wings of the country.

16. Before discussing policies and the detailed programme, it is necessary to have an overall perspective of population growth and the urbanization prospects. According to Planning Commission's estimates Pakistan will have a total population of 113 million in 1965. It is expected that the total population in 1985 will reach 186 million; 103 million in East and 83 million in West Pakistan. It is forecast that East Pakistan population will have a 25% Urban component (against the 1965; 7%) while West Pakistan would have a 45% urban component (against the 1965; 22%). This means a five-fold increase in urban population of the country in 20 years time. This growth rate is based on the industrial development and other related programmes of the nation for this period. If this expansion were merely left to chance, our urban areas will be engulfed in slums and the living conditions will deteriorate so critically that the results might make the environment worse off than it would have been if the proposed investment programme had not been implemented. As urban growth results directly from the development programme of various sectors, if we wish that the people should derive real benefits from the overall development programme, it is essential that a well thought out plan, based on anticipated urban growth, be prepared for meeting the most essential needs for developed land, housing, community services and utilities, transport and all related buildings and facilities, in broad terms for 20 years, and in precise terms for 1965—70.

17. The present rate of urbanization, on the basis of the past rate of growth is approximately 5 to 6% per annum. It is expected that with the proposed Third Plan investment in industries and related sectors, this rate may be 8—10% for 1965—70. We have at least 70 important urban centres having a population of more than 25,000. With this enhanced rate of growth, all these centres will grow dramatically. This will necessitate a crash programme of 'interim and detailed city and regional plans to meet the immediate problems. In addition the industrial development programme will need to be coordinated with the town planning programme of the Third Plan.

18. The recent experiments of Rural Works programme through Basic Democracies have proved to be a great success. It has been shown that given the resources and guidance, local rural organizations lack neither the capacity for practical planning, nor the ability to execute the plans efficiently. This system of " grass-root " planning needs to be linked to the whole sectoral effort in the rural areas, as well as tried on limited scale in attacking some of the urban problems like slum clearance, improvement of drainage and repair and improvement of internal roads, creation of parks and open spaces in congested areas and related works. In order to make the approach more successful, the whole Works programme needs to be envisioned within the context of Regional Planning on Divisional, District and Tehsil|Thana levels.

III. POLICIES

19. For launching an intensive attack on all the existing and forthcoming problems a number of basic polices need to be considered on a top priority basis ;

(i) In order to achieve a reasonable amount of success in the implementation of the programme, it is essential that independent departments of Physical Planning & Housing be established in both the Provinces. These can be easily created by regrouping the existing scattered units and adding the most essential professional staff. These Departments will act as agencies for the coordination of sectoral Development Projects, particularly in the field of industries,, with town & regional planning schemes to ensure a healthy growth of urban areas resulting from industrial development.

(ii) Collection of data, evaluation of needs and conditions, planning and housing surveys and legislation and a reappraisal of building codes and specifications to be initiated at an early date on a priority basis.

(iii) Establishment of housing and building research centres at Lahore and Dacca to receive immediate attention.

(iv) In our towns and cities that have grown rapidly as a result of industrial development and the tendency of refugees to swarm into towns, the problems of transportation within the towns have become acute. These need to be attacked within the framework of urban planning.

(v) First priority should be assigned to the housing needs of slum dwellers, lower income groups and industrial workers, as well as promotion of self help and co-operative housing methods for attacking the national housing problem.

(vi) Direct responsibility of the government for providing built or subsidized houses and plots should be limited to the most urgent needs of the slum dwellers, lower income groups and lower income government servants.

(vii) Private initiative and capital to be mobilized more effectively and channelled towards mass production of low cost housing, by a policy of tax concessions and credit facilities.

(viii) Development and rationalization of building industry with special emphasis on local materials, standardization and prefabrication.

(ix) Due to paucity of resources, the programme of new government offices and buildings should meet only essential needs during the Plan period according to functional, economical and sound standards and specifications.

(x) Appropriate Master Plans for rural and urban watersupply, sewerage and sanitation should be prepared for East and West Pakistan.

(xi) Research in environmental sanitation including air and water pollution should receive priority. Results should be enforced through appropriate standards and legislation.

IV. THE DEVELOPMENT PROGRAMME

The development programme comprises of eight distinct parts each one of which is described below :—

Basic Development

20. Basic development is required for laying the foundations for the whole sectoral programme. Independent departments of Physical Planning & Housing in each wing will be created by regrouping existing facilities and services and adding some modest extra

staff and facilities. Preparation of urban and regional development plans for important cities and regions, as well as collection of physical planning and housing data and surveys, housing, city and regional planning legislation and revision of building codes and specifications will receive attention. Existing modest efforts at Lahore and Dacca towards housing and building reasearch will be developed into Housing and Building Research Centres. Special Institutes or Academies for training in ubran and regional development will be initiated at suitable locations in East and West Pakistan. Preliminary work will also be initiated for preparation of special maps for national and regional physical planning as well as aerial photography and mapping for general development plans. Modest efforts for vocational training in building trades will be developed into full-fledged building trade schools in each wing. These projects and programmes will demand substantial resources. The Third Plan proposes an allocation of Rs. 102 million to meet only the most urgent needs.

Housing and Slum Clearance

21. It was found in 1960 that using extremely low standards and ignoring the overcrowded houses, there was a housing backlog of 6 lakh dwelling units. Estimating the minimum additional needs of urban areas as 5 lakh new dwelling units, the total nimimum housing need for the Second Plan period totalled up to 11 lakh dwelling units. The second Plan will hardly provide 1½ lakh units, thus leaving a backlog of 9½ lakh units. Once again ignoring the overcrowded conditions, the minimum absolutely essential needs for the Third Plan period were estimated to be of the order of 6 lakh dwelling units. The total need for the Third Plan accordingly comes up to 15½ lakh dwelling units. Due to extreme paucity of resources, it is not possible to provide all these dwelling units and accordingly it was decided that only 3,50,000 plots should be developed to meet the most urgent needs of shelterless families, slum dwellers and lower income public servants. The main emphasis under this programme will be on slum clearance and housing of low-income groups. The problem of refugee housing is an integral part of this programme and is considered within the overall problem of urbanization. Instead of having a separate programme for refugee housing, the Plan envisages a single consolidated programme for slum clearance and housing of low-income groups including the shelterless refugees. It is proposed that these slum dwellers and the low-income groups should be settled in properly designed colonies and township, with possibilities of employment available in these settlements. In case of low-income housing not more than 50% of the families should be settled by construction of single room nucleus houses and the balance by allocation of developed plots. In order to avoid social segregation it is suggested that other classes and income groups are also included in this settlement programme,

thus creating balanced communities representing different strata of our society. The practice of "neighbourhood unit planning" must be adopted as an approach for this programme. It is contemplated that the allocation of Rs. 550 million will be sufficient to initiate this programme on a very modest scale. The requirements of housing government servants are large and pressing. A separate programme of Rs. 184 million is included in the Plan to meet the most urgent needs in East and West Pakistan. As the Plan proposes to encourage the growth and development of Co-operative Housing, resources worth Rs. 70 million are allocated for aiding such societies. It is expected that problem of Industrial workers housing will be tackled by Industrial Workers' Housing Corporations, which the Government should be willing to support. The Government will contribute Rs. 30 million for the initiation of such Corporations while the bulk of the finances will be raised by industrialists themselves. It is recommended that economical, functional and pleasant designs of houses based on an intensive utilization of local materials be introduced. Resources in the public sector are limited. Introduction of a number of vital housing policies encouraging the semi-public and private sectors is expected to alleviate some of the needs and problems.

Community Services and Utilities

22. Most of the urban areas are in urgent need of piped water supply, sewerage and drainage, while a large number of villages need protected water supply and sanitation. The Third Plan proposes to meet the requirements of 60 selected urban areas and drill 150,000 shallow and 50,000 deep tubewells in East Pakistan, and provide protected water supply to 500 villages and rural health centres in West Pakistan. The needs of the ongoing projects of Chittagong and Dacca Water Supply and Sewerage as well as Karachi Water Supply, Sewerage and Drainage project are included in the allocation for East and West Pakistan in the public sector. In both the wings of the country very scanty information is available with respect to the actual conditions and needs of water supply, sewerage, drainage and general sanitation facilities in the urban and rural areas. It is urgent that general Master Plans be prepared, surveying these needs and conditions and assigning priorities for various urban and rural communities. Preparation of these Master Plans is included in the development programme for each province. Rural sanitation deserves special attention. Research and experimentation in this respect will be initiated in selected localities in both the Provinces, and the present pilot programme of providing rural latrines will be expanded in East Pakistan and initiated in West Pakistan on experimental basis. A sum of Rs. 640 million is provided for urban water supply and sewerage and Rs. 180 million for rural water supply and sanitation. In order to meet the targets of rural water supply, addition allocations are provided in the Works programme. A modest allocation of Rs. 20 million is

provided for meeting the most urgent needs of experimentation, research and training in public health engineering and environmental sanitation.

Government Offices, Buildings and New Capitals

23. Only the most essential government offices and buildings will be constructed during the Plan period, based on new economical and functional designs with an intensive utilization of local materials. An allocation of Rs. 211 million is provided to meet these requirements. Islamabad and the Second Capital at Dacca are important experiments in town planning and it is expected that a dynamic leadership will be given to the country by evolving economical, functional and attractive designs utilizing local materials and providing new specifications and methods of construction, construction planning and management and by setting up standards for housing, community planning and civic buildings. Due to their national importance and urgent need for completion of essential buildings and related services and facilities, a sum of Rs. 470 million is provided.

Physical Planning and Development in Special Areas

24. In order to promote systematic development and growth in Azad Kashmir, Northern, Frontier and Tribal areas and Chittagong Hill Tracts and other special regions it is essential to prepare comprehensive regional development plans for all these areas. A sum of Rs. 35 million is allocated for preparation of such plans and meeting the essential needs of these regions within the planned framework.

Semi-Public Sector

25. This sector includes the programme of Improvement Trusts and Development Authorities, Industrial Workers' Housing Corporations, House Building Finance Corporation, and Cooperative Housing Societies. It is proposed that Co-operative Housing Institutes be developed at Lahore and Dacca to promote Co-operative Housing Societies. A sum of Rs. 70 million is earmarked for assistance to Co-operative Housing Societies in both wings of the country. It is expected that the most pressing development needs of Local Bodies, Improvement Trusts and Development Authorities will be met out of an allocation of Rs. 98 million in the Semi-Public Sector and the balance by allocations in the Works programme.

Private Sector Housing

26. It is proposed that with special housing policies and incentives provided by the Government, the private sector will be geared more effectively to provide housing facilities for the middle and lower income groups. So far the achievements in this sector have been mostly limited to upper and middle income groups. Housing in the lower income groups in many cases suffers from poor designing, inadequate facilities and services and lack of proper planning. Efforts

will be made to integrate the private sector more effectively with the public and semi-public sectors to achieve better results. An effort could be initiated in Karachi on a Pilot Project basis in case of Korangi by declaring it either as an independent area under the Municipal Act or by constituting a Korangi Development body with limited public assistance and large scale private participation. Such an effort will encourage private entrepreneurs to participate in house construction and various industrialists will come forward more rapidly to set up industries which will provide jobs for lower income groups. A number of similar measures can help to attract private efforts in solving the housing problem on a unified basis. The Plan allocates a sum of Rs. 3,150 million to meet the urgent needs of various programmes in both wings of the country.

Problem of Refugees from India

27. The recent phenomenon of displacement of a large number of muslim families from India to East Pakistan is being examined intensively and appropriate policies and programmes for their settlement will be spelled out.

TABLE I

Selected Physical Targets for the Third Plan.

Item	East Pakistan	West Pakistan	Total All Pakista
1. Organization for physical planning and housing.	1	1	2
2. Establishment of housing and building research centres.	1	1	2
3. Establishment of appropriate institutions for training and research in urban and regional planning and development.	1	1	2
4. Establishment of building trade schools.	4	6	10
5. Establishment of industrial workers housing corporations.	1	2	3
6. Establishment of co-operative housing institutes at Lahore and Dacca.	1	1	2
7. Preparation of urban and regional development plans.	10	14	24
8. Urban land development in public, semi-public and private sectors.	150,000 Plots.	200,000 Plots.	350,000 Plots.
9. Watersupply and sewerage arrangements for urban areas.	25 Cities	35 Cities	60 Cities
10. Watersupply and sanitation for rural areas.	150,000 shallow & 50,000 deep Tube-wells.	500 Villages (including Rural Health Centres as well as water supply needs of Barage Areas).	—

TABLE II

Development Programme, 1965—70.

(Million Rs.)

Public Sector (By Executing Authorities)	East Pakistan	West Pakistan	Central Government			Total All Pakistan
			East Pakistan	West Pakistan	Total	
1. Basic development programme	50·00	50·00	1·00	1·00	2·00	102·00
2. Housing						
(*a*) Slum clearance & public housing	300·00	250·00	—	—	—	550·00
(*b*) Public servants housing	100·00	50·00	20·00	14·00	34·00	184·00
3. Community services & utilities						
(*a*) Urban water supply, sewerage & drainage ..	200·00	200·00	—	—	—	400·00
(*b*) Karachi watersupply & sewerage	..	40·00	—	—	—	40·00
(*c*) Chittagong and Dacca WASA Project	200·00	..	—	—	—	200·00
(*d*) Rural watersupply and sanitation	90·00	90·00	—	—	—	180·00
(*e*) Experimentation, research & training ..	10·00	10·00	—	—	—	20·00
4. government buildings offices	100·00	60·00	24·00	27·00	51·00	211·00
5. New capitals	..	..	100·0	370·00	470·00	470·00
6. Programme in special areas						
(*a*) Tribal areas	—	10·00	—		—	10·00
(*b*) Azad Kashmir	—	—	—	10·00	10·00	10·00
(*c*) Northern regions	—	—	—	8·00	8·00	8·00
(*d*) Frontier regions	—	—		5·00	5·00	5·00
(*e*) Special areas in East Pakistan	2·00	—	—	—	—	2·00
Total Public Sector ..	1,052·00	760·00	145·00	435·00	580·00	2,392·00

TABLE II—*contd.*

Public Part of Semi Public Sector	East Pakistan	West Pakistan	Central Government			Total All Pakistan
			East Pakistan	West Pakistan	Total	
1. Aid to Local Bodies						
(*a*) Dacca improvement trust	10·00	—	—	—	—	10·00
(*b*) Chittagong development authority	18·00	—	—	—	—	18·00
(*c*) Khulna development authority	30·00	—	—	—	—	30·00
(*d*) Trusts & authorities in West Pakistan	—	40·00	—	—	—	40·00
2. Aid to co-operative housing	30·00	40·00	—	—	—	70·00
3. Industrial workers' housing corporations	10·00	20·00	—	—	—	30·00
4. House building finance corporation	—	—	100·00	50·00	150·00	150·00
Public part of semi public sector	98·00	100·00	100·00	50·00	150·00	348·00
Housing and building activities in the private sector ..	1,850·00	1,300·00	—	—	—	3,150·00
Grand Total (Public, public part of semi-public and private Sectors)	3,000·00	2,160·00	245·00	485·00	730·00	5,890·00

CHAPTER 16

HEALTH

The health problems confronting the country are diverse and complex. The low state of health and vitality makes the people more susceptible to illness. Overcrowding and absence of basic sanitary facilities such as pure drinking water and sewerage disposal expose them to diseases like tuberculosis, malaria, worm infections and epidemics like cholera, typhoid and smallpox. Poverty compels them to eat food with little nutritive value. In short there is the vicious circle of poverty and insanitation causing disease and low vitality leading to low production resulting in poverty and insanitation.

2. The first step in the effort to break this vicious circle is to realise that economic development and improvement of health are inter-dependent and then to address ourselves to the task not only of providing preventive and curative services but also of creating all those basic and environmental conditions which are conducive to healthy living.

I. IMPLEMENTATION DURING FIRST AND SECOND FIVE-YEAR PLANS

3. The implementation of the health programme proposed in the First Plan was very slow. Only about 50 per cent of the total allocation was utilized. The utilization of funds provided for preventive services was even slower—about 25%—although the First Plan had placed greater emphasis on preventive services. The main reasons for these serious shortfalls were lack of qualified and trained personnel for planning and implementation and delays in the allocation of funds.

4. The pace of implementation in the health sector improved considerably during the Second Plan period and the entire allocation of Rs. 370 millions is likely to be utilized by 1964-65. The Plan target with regard to the increase in the number of doctors has already been reached, and by the end of 1962, the number of hospital beds had risen to 32,000 as compared to the Plan target of 36,000.

II. PERSPECTIVE PLAN TARGETS

5. The goal during the next 20 years is to provide reasonably adequate medical facilities to the entire population. To attain this long range objective, we shall have to concentrate on four aspects :

1. Building up of integrated and streamlined health services.
2. Training of personnel to man these services.
3. Provision of specialised services like school health, industrial health, maternity and child health etc.

4. Providing guidance and leadership to improve environmental sanitation and nutritional standards, allocations for which are made in sectors other than Health.

In physical terms the following minimum facilities will be required to achieve our long-term goal :—

(a) One doctor for 3,000 persons.
(b) One nurse for 4,500 persons or one nurse to 5 hospital beds.
(c) One lady health visitor for 10,000 persons.
(d) One hospital bed for 1,000 persons.
(e) One tuberculosis hospital bed for 5 fatal cases caused by the disease.
(f) 3,800 rural health centres at the rate of one centre for 50,000 population.
(g) 1,900 T.B. Clinics at the rate of one clinic for 100,000 population.

These standards are extremely modest as compared to those obtaining in advanced countries of the world as a glance at the table below will reveal :

	Pakistan 1965	Pakistan 1985	U.K. 1950
Doctors	1:7300	1:3000	1:700
Nurses	1:34000	1:5000	1:300
Hospital Beds	1:3300	1:1000	1:100
Lady Health Visitors	1:110,000	1:10,000	1:4000
T.B. Beds	1:50 deaths	1:5 deaths	1:2 deaths

But due to limitations and restraints imposed on us by shortage of trained manpower and scarcity of resources it will not be realistic to aspire for more ambitious standards.

III. PROGRAMME DURING THE THIRD FIVE-YEAR PLAN

6. The programme to be undertaken during the Third Five-Year Plan is designed to move with optimum speed towards the goals of the perspective Plan.

Preventive Services :

7. High in the list of preventive services must come improvement in environmental sanitation with special emphasis on the provision of community water supply and related drainage systems along with effective

arrangements for the disposal of domestic and industrial wastes. With the provision for safe water supplies, water-borne diseases like cholera, typhoid, dysentery and diarrhoea, which claim 50,000—60,000 lives annually, can be eliminated to a large extent. Provision for these items has been made in the Physical Planning and Housing Sector.

8. Malaria is responsible for nearly 100,000 deaths per year and also causes wide-spread debility. A scheme for the complete eradication of malaria, estimated to cost Rs. 520 million over 14 years, has been taken up since 1960-61. In the districts which have so far been covered under this scheme it has been observed that the parasitic rate, which is an index of the intensity of incidence of malaria, has come down from 20—25 per cent to about 4 per cent. Work on the scheme would be continued according to schedule during the Third Plan. Rs. 312 million are being devoted to this programme.

9. The programme for setting up rural health centres was initiated during the Second Plan. Each rural health centre provides preventive and curative cover to approximately 50,000 people. 320 Rural Health Centres had been provided for in the Second Plan ; but the number had to be reduced for it was found on re-appraisal that each centre would cost more than was originally estimated. By 1965, about 160 Rural Health Centres will be in operation in the country. The Third Plan provides for an additional 600 Rural Health Centres which will cover a population of about 30 million and provide health education, curative services and advice on maternity, child health and family planning. In Pakistan where even rudimentary knowledge of causes of disease and methods of prevention is lacking, rural health centres would go a long way in educating the masses.

10. Tuberculosis is essentially a disease of poverty. Extreme poverty in the country not only makes the people highly susceptible to this disease but also retards their recovery once they have succumbed to it. The high incidence of the disease among the most active group of population, *i.e.*, ranging from the age of 20 to the age of 40 years, results in immeasurable national loss. Tuberculosis claims about 125 to 150 thousand lives annually and poses a major health problem. Eradication of this disease is linked with improvement in the general living standards of the people. To control this disease a three-pronged attack, detailed below, will be continued during the Third Five-Year Plan :

(a) *B.C.G. Vaccination Programme* :

B.C.G. vaccination provides protection for a period of 3 to 4 years against the disease. The Second Plan provided for a country-wide coverage under the B.C.G. Vaccination Programme. About one-fifth of the population has so far been vaccinated. This Programme will be continued till the entire population of the country is vaccinated. In the Third Five-Year Plan, a sum of Rs. 10 million has been provided for this purpose.

(b) *Tuberculosis Clinics* :

For diagnosis, treatment and welfare of those who are suffering from the disease, the emphasis is now shifting from the provision of hospital beds to the provision of T.B. Clinics where ambulatory treatment can also be carried out.

At the rate of one clinic for a hundred thousand population we will have to provide, 1,900 clinics to cover the entire population of the country in the next 20 years. There are at present 82 clinics in the country. 220 additional clinics will be put up during Third Plan period. Since there are fewer clinics in East Pakistan, a bigger share of the 220 clinics will go to that Province. At the rate of about Rs. 250,000 per clinic the total cost of constructing 220 clinics will be about Rs. 55 million.

(c) Although from now on emphasis will be on the protection of population through B. C. G. Vaccination and for provision of T. B. Clinics, yet it will be necessary to increase to a certain extent the number of beds needed for the treatment of T. B. cases. There are 2,500 beds for T. B. patients in the country, a large number of which is located in West Pakistan. This gives a ratio of one bed for 50 deaths caused due to tuberculosis. If we keep a target of one bed for five deaths to be attained in a period of 20 years, we need 22,500 additional beds. 750 T. B. beds have been provided for in the Third Plan out of which 500 will go to East Pakistan. The amount needed for this purpose will be Rs. 15 million.

Industrial Health :

11. The current pace of industrialization in the country makes it imperative that urgent attention be paid to problems of urbanization and sub-urbanization arising from the creation of new townships. Whereever new concentration of industrial workers occurs, special services will be required to deal with their routine health needs and to protect both the workers and local environment from industrial hazards. Special attention will have to be paid to the protection of workers in atomic energy establishments. Setting up laboratories, training technical personnel and providing protection in atomic energy establishments will, therefore, be necessary. Provision has been made in the Third Plan for this purpose.

Health Education :

12. One of the principal objectives of the health programme will be the promotion of training in health education techniques. No health programme can be effective unless there is understanding, support and

participation of the people. In a population that is largely illiterate, ignorant and apathetic, health education acquires special significance. This will be organized not only for all health workers but for members of the teaching profession and for such community development personnel as are required to deal with health problems. Only through such training, can we expect to ensure that modern techniques of mass communication will be used to maximum effect by all persons in close contact with the general public.

Vital and Health Statistics :

13. In order that programming may be made more purposeful, there is an urgent need to develop adequate vital and health statistics services. The collection, correlation and analysis of vital and health statistics and the maintenance of health records will have high priority in the development of our health services. Adequate funds have been provided in the Third Plan for this purpose.

14. Provision has also been made for carrying out surveys and studies to find out ways and means for the improvement of the nutritive value or our diet. To provide proper health cover to schoolgoing children a school health service will be organized.

IV. CURATIVE SERVICES

Hospital Beds :

15. At present there are approximately 33,000 hospital beds in the country which give a ratio of 0.34 beds per thousand population. It is proposed to increase the number of hospital beds from 33,000 in 1964-65 to 47,000 over the Third Plan period. This increase will include the beds which are being provided under other programmes like Rural Health Centres, Postgraduate and Undergraduate Medical Institutions. In providing hospital beds priority will be given to the hospitals at Tehsil and Sub-Divisional Headquarters which will serve as referral hospitals under the Rural Health Programme. Since there are fewer hospital beds in East Pakistan a larger share, 8,000 beds out of 14,000 will go to that Province during the Third Plan.

Medical Education and Research :

16. There are at present 12 medical Colleges in the country—6 in East Pakistan and 6 in West Pakistan. These colleges will be improved and strengthened during the Third Plan. In addition, 3 new Medical Colleges—2 in East Pakistan and one in West Pakistan—will be started during the Third Plan. The Post-graduate Medical Centre at Karachi will be further improved and expanded and a new Post-graduate Medical Institute will be set up in East Pakistan. The scheme for setting up a School of Tropical

Medicine at Dacca which is under implementation will be carried over to the Third Plan. The number of doctors is expected to increase from 15,000 in 1964-65 to about 19,000 in 1969-70.

17. Fundamental to many activities mentioned in the foregoing paragraphs is the conduct of research into numerous medical and public health problems to facilitate effective planning of future services and training of post-graduate personnel to man the medical colleges and the bigger hospitals.

18. Medical research which is at present virtually non-existent will be initiated during the Third Plan and Post-graduate Medical Institutions set up for imparting specialist courses and awarding post-graduate degrees or diplomas.

19. There is an actue shortage of paramedical personnel like nurses, health visitors, midwives and compounders. Facilities for the training of such personnel will be expanded considerably by setting up new training institutions and expanding the existing ones. The total numbers of nurses is expected to increase from 3,200 in 1964-65 to 7,000 in 1969-70 and that of lady health visitors from 1,000 to 4,000. Six new training centres for nurses and six new training centres for lady health visitors will be set up during the Plan. All the new training centres for nurses will be located in East Pakistan.

Family Planning :

20. The enormous rate of population growth caused by a falling death rate without a corresponding decline in the birth rate in recent decades, has virtually swallowed up whatever economic progress Pakistan was able to achieve during the first 12 years of its Independence, allowing very little increase in *per capita* income. Only during the Second Plan period has some sizeable increase in *per capita* income been achieved. If the current trend of a declining death rate and a high birth rate continues the population may increase at even faster rates in future, and be a hindrance to the efforts for improving the living standards of the people. In the First Plan, the rate of population growth was assumed to be 1.4 per cent per year, but by the end of the Plan period the underestimation involved in this assumption was apparent. It is estimated that the average annual rate of population growth would be 2.6%. The task of arresting the rate of population growth has, therefore, assumed much greater significance and urgency and should receive utmost attention during the Third Plan.

21. The importance of Family Planning was also stressed in the First and Second Plans ; but the actual programme has been very much limited in scope and has not so far produced the desired impact. The

effectiveness of this programme will not depend on the availability of financial resources only : social and religious prejudices must be overcome ; adequate organizational and institutional arrangements to popularize the programme must be developed and, most important of all, some simpler and cheaper methods of birth control must be popularised. Many of these pre-requisites are still missing and may take time to develop, but a more vigorous effort in this direction must be made without further loss of time.

22. The Second Plan made an allocation of Rs. 35 million for Family Planning. The programme provided for a coverage of 1.2 million families besides training of 1,200 personnel, and expanding facilities for research and publicity. The actual utilization of allocated funds is not likely to exceed 50 per cent and the achievements in physical terms may be even lower, although the organizational frame-work for the programme at the Central and Provincial levels has improved.

23. The Third Plan proposes an allocation of Rs. 150 million for Family Planning. A broad-based programme is envisaged utilizing all the information and knowledge that has been obtained from our past experience. There are at present fifteen different Research Projects in progress in both Wings. Each Project uses a different approach, a different kind of personnel and different kind of contraceptive. The future programme will adopt those that are found to be most effective from the evaluation of these projects.

The programme will have three main aspects :

(i) Education and motivation of the general population through professional personnel and people in influential positions.

(ii) Distribution of supplies.

(iii) Provsion of service facilities.

24. All the public and private agencies and institutions will be utilized specially those that come in direct contact with the people.

25. Family Planning Advisers will be needed in those Government Departments that play an important role in implementing the Family Planning Programme, *e.g.*, Social Welfare, Information and Public Relations, Education and Basic Democracies.

26. Since the success of the Family Planning Programme is vital to attain economic viability this programme has been assigned high priority in the Plan. The administrative level of the implementing authority needs to be raised ; what is wanted are forceful, dynamic, top level administrators who can organize this programme. Family Planning must be

more in the nature of a movement than a programme, so that ultimately a planned limited family becomes a way of life.

V. POLICY ISSUES

27. The policy of Health Planning is to provide the maximum health benefits to the population within the limits of available human and material resources. For this reason preventive services are given a high priority and roughly 60% of the allocation in the health sector is devoted to preventive work. Our existing training system, however, is not designed to meet the requirements of this policy. Medical training lays much greater stress on the curative aspect of medicine and tends to produce personnel only trained in this field. Thought must be given by the implementing authorities to this problem. It may be necessary to give two different kinds of diplomas in medicine, doctor in public health (D.P.H.), and doctor in medicine (M.D.), the D.P.H. graduates being authorised to do preventive work only. The division can be made after the first two years in Medical College ; the period of clinical training for the D.P.H. can be reduced to two years and made to include field work in Rural Areas as part of the syllabus. The other alternative is to train another category of worker to work as a health development officer. This person could be B.Sc. in a special course of two years after the Intermediate. His university training will include Rural Sociology, Family Planning and Public Health with field work in rural community for about one year. It will be necessary to provide inducements to attract students to this course. Jobs will have to be ensured and financial returns in Government services made attracive for these workers.

28. As our Rural population, forming more than 80% of our total population does not have proper health facilities, the policy is to provide them with both preventive and curative services by establishing Rural Health Centres and Referral Hospitals. The number of health centres is at present quite small but already the question of staffing is posing a problem. This problem will tend to become more acute unless suitable steps are taken now. Doctors are un-willing to work in rural areas for the following main reasons :

(a) *Inadequate Financial Returns* :

The doctor posted in rural health centres and in many referral hospitals is paid poorly and ranked under Class II Service. He has no scope for private practice and his living conditions are bad, without electricity, sanitation, telephone or transport.

(b) *Un-satisfactory Working Conditions* :

The working conditions of a doctor posted in Rural Health Centres and Referral Hospitals leave much to be desired. There are inadequate investigation facilities, lack of equipment and trained personnel and complete absence of any kind of supervision. Because of his inability to use the knowledge that he has taken so many years to acquire the doctor tends to feel frustrated.

29. Any steps taken to remedy this state of affairs will in the long-run improve the level of health services of the country. It is suggested that six or eight Rural Health Centres should be incorporated through a chain of Referral and District Hospitals with one teaching college and hospital. The doctors posted throughout this chain should form part of the teaching institutions. Special courses, lectures, seminars and clinical conferences should be conducted at all levels. There should be regular visits by the staff of the teaching hospital to the other institutions in the chain so that patients and doctors at all levels can have the benefit of expert advice.

30. If the Health Services are constituted in this manner students will have the opportunity to work at other institutions besides the Medical College Hospital. Medical graduates can be rotated during the period of internship and conscription service through Rural Health Centres, Referral and District Hospital instead of being posted only at Medical College Hospitals. This step could raise the level of our health services and would certainly provide an incentive for the personnel working in these services. There are at present 12 Medical Colleges in Pakistan, six in each Wing. Pilot projects can be started by including one Medical College, one District Hospital, one Tehsil Hospital and two Rural Health Centres in each Wing, in one such scheme. Gradually this scheme can be expanded to include almost all the Institutions in the country.

Health Education :

31. The importance of health education is well recognised. In Pakistan knowledge of diseases and how they are caused is sadly lacking. Most health practices are based on beliefs that are far removed from science and have as their foundation social custom, family tradition and superstition. No health programme can be successful unless the average man particularly in the villages is helped to understand both the services which a health unit can provide and his own contribution towards it. He must be taught to collaborate intelligently if the maximum health benefits are to accrue to the community. This requires a complete change in thinking, knowledge and attitude which can only be effected by intensive health education. First of all the knowledge of those who are required to effect this change must be ensured before they can teach successfully. The Institute of Hygiene and Public Health in Lahore is opening a Department of Health Education for training Health Educators. The health educators trained from this institution should be utilized as heads of health education departments. It is, therefore, necessary to open a Department of Health Education in all training schools

for medical and paramedical personnel. This Department should be headed by a trained Health Educator. The Departments of Preventive Medicine in Medical Colleges should also have a health education branch and should include some field work in the subject.

32. More thought must be given to private investment in the health sector. It should be a pre-requisite to the establishment of any industrial unit to provide adequate medical facilities. This should be in the form of a self contained hospital unit covering both preventive and curative aspects. The preventive service should undertake environmental sanitation with special reference to the diseases arising out of their own particular set up. The private sector should be given incentives to establish hospitals and dispensaries. These can be in the form of titles, public recognition and tax rebates.

33. Industrial Health Departments must become more active. They must be consulted before any industry or factory is set up, as to location, precautions for the safety of the workers and protection to the population living in that area. Factory laws should be revised and re-framed.

34. To help private medical practitioners in opening hospitals it is suggested that provision be made in the investment schedule for health. They can avail of this on the condition that some facilities for free treatment are provided.

35. The low state of nutrition is one of the most serious hindrances in raising health standards. A minimum standard balanced diet which will be within the resources of the common man must be worked out and agricultural targets correlated with it. The accent from production of cereal and other bulk food must shift to the production and utilization of protein-rich and protective food stuffs.

36. The country has to spend a large amount of foreign exchange on all varieties of medical equipment and drugs. To make it self-sufficient the manufacture of basic and semi-basic drugs should be encouraged.

37. The health allocation in the rural works programme should as far as possible be utilized in areas where Government facilities are not provided. An earnest endeavour should be made to provide the same kind of facilities as are offered by Rural Health Centres of the Government Programme. The stress should be on preventive services including the improvement of sanitation and water supply, and on mass vaccination and inoculation programmes.

38. A large part of our development budget is spent on construction and this cost is increasing every year. A committee should be set up to investigate this and also to work out standard designs for medical colleges, health centres, hospitals, nursing schools, etc.

39. No health programme can be successful without the active participation of the people at large. The idea of self-help must be encouraged. Wide publicity must be given to the Plan and its objectives, and the vital role assigned to the common man in its implementation.

*Proposed **Allocation for the Health** Sector during the Third Plan*

(Million Rs.)

	East Pakistan	West Pakistan	Centre	Total
Preventive services				
Malaria eradication	160·0	150·0	2·0	312·00
Tuberculosis control :				
(*i*) B. C. G.	5·0	5·0	..	10·00
(*ii*) Clinics	25·0	20·0	10·0	55·00
(*iii*) Beds	10·0	5·0	..	15·00
Family planning	70·0	70·0	10·0	150.00
Rural health centres	100·0	100·0	..	200·00
Vital and health statistics Health education School health Nutrition research	20·0	20·0	13·0	53·00
Curative services				
Hospital beds	85·0	65·0	35·0	185·00
Medical education :				
(*i*) Undergraduate	80·0	50·0	..	130·00
(*ii*) Postgraduate	30·0	5·0	10·0	45·00
Training of paramedical personnel	15·0	10·0	..	25·00
Private investment	20·0	20·0	..	40·00
Total ..	620·0	520·0	80·0	1220·00

Physical Targets for Third Plan (Health Sector)

	1965	1970
Doctors :		
Number of doctors	15,000	19,000
Ratio	1 : 7,300 population	1 : 6,800
Number of medical colleges	12	15
Postgraduate medical institutes.	1	2
Nurses :		
Number of nurses	3,200	7,000
Ratio	1 : 10 hospital beds	1 : 7·0 hospital beds.
Ratio	1 : 34,000 population	1 : 18,000 population.
Number of nurses training centres.	17 + 1*	23 + 1*
Hospital beds :		
Number of beds @	33,000	47,000
Ratio	1 : 3,300 population	1 : 2,700 population.
Rural health centres :	160	760
Percentage of population covered	7.2%	30%
Lady health visitors :		
No. of lady health visitors	1,000	4,000
Ratio	1 : 110,000 population	1 : 32,000 population.
No. of training centres for L. H. V.	8	14
T. B. control :		
T. B. clinics	82	300
T. B. beds	2,500	3,200
Ratio	1 Bed for 50 deaths	1 bed for 36 deaths.

Note.—*Postgraduate Training Centre for Nurses.

@ Beds provided under rural health centres programme and attached hospitals for medical colleges have been shown here.

CHAPTER 17

SOCIAL WELFARE

Development entails wide spread social changes which in turn affect the institutional frame-work of the society and the social attitudes of different groups affected by the change. The effect on some is favourable while on others it may be unfavourable particularly during the period of transition. A primary aim of the development strategy should be to minimize such unfavourable effects and ensure a smooth socially harmonious transition, otherwise social tension and political instability are likely to impede the process of economic growth and restrict the benefits of development to a limited section of the population.

2. The extent to which social objectives have to be reconciled with economic objectives at any given time depends on the size and composition of a plan, the role of the public and private sectors, political system, economic policies and the general economic condition of the country. The growing importance of social objectives, in the context of the Third Plan is discussed in an earlier chapter. But in addition to this basic frame-work of social objectives, certain specific programmes are necessary to develop social institutions and services to maximize the capacity of different groups to adjust themselves to economic and technological changes. Social Welfare work prevents disintegration of the family and disruption of the community and conserves human resources and improves social health. It seeks to bring about a positive, constructive and healthy change in attitudes and social institutions and helps mobilize private resources to meet social needs. Thus it removes social evils and ills, solves existing social problems, trains and rehabilitates the needy and creates socially harmonious conditions in the country.

I. IMPACT OF THE FIRST AND SECOND PLANS

3. In the first and Second Plan period, the social welfare programme included organisation and administration of social welfare activities at the public and private levels, training, research, urban community development, grants-in-aid to voluntary agencies, medical social work, child and youth welfare, recreational services for children and youth, delinquency and probation, rehabilitation and training of the socially and physically handicapped. In the First Plan a sum of Rs. 33 million was allocated for the implementation of some of these programmes. But only 25 per cent of the Plan allocation could be utilised. In the Second Plan, the allocation was raised to Rs. 50 million but the actual utilization is not likely to exceed Rs. 40 million. There has, however, been considerable improvement in the organisational frame-work for implementing social welfare programmes during the Second Plan period. Social Welfare activity has been transferred to the Provincial Governments which have set up Directorates of Social Welfare, appointed well-trained professional social

workers and organised voluntary efforts and thus enhanced their capacity for effective utilisation of financial grants.

II. OBJECTIVES OF THE THIRD PLAN

4. The specific objectives of the Third Five-Year Plan in the field of social welfare would be :

(a) to consolidate and expand existing preventive, curative and rehabilitative social services ;

(b) to initiate new programmes to meet untackled needs and problems of individuals, families and communities ;

(c) to perform promotional functions in the national development process.

5. To achieve these objectives social welfare work will be organised directly through social welfare agencies, both public and private and indirectly under the auspices of other social development sectors like education, health, housing, manpower, co-operation and works programme.

6. Training institutions and arrangements for in-service and on-the-job training for social workers have been developed in the two provinces and trained workers are now available. In the Third Plan period nearly 2,500 professional social workers will get training in these institutions.

7. There is greater social awareness amongst the people who are willing to mobilise the human, material and financial resources to set up voluntary organisations and institutions for meeting their own needs. Private effort needs to be encouraged, but in the past governmental assistance to private social work agencies has been inadequate. To make up this deficiency the allocation of funds for professional consultation and for assistance to private agencies has been substantially increased in the Third Plan.

Financial Allocations

8. The activities of voluntary organisations are limited even in the urban areas whereas needs for social welfare services have grown immensely over the years. Therefore, social welfare activity in the public sector is being increased by 400% in financial terms over the Second Plan.

Physical Targets

9. It is expected that about 1450 physical units will be organised in the social welfare sector. These will pertain to activities like education, training and research in social welfare work, community development, financial and professional assistance to private agencies, social services for children, youth and families, medical social work, school social work, recreational services, training and rehabilitation services for the socially

and physically handicapped, social services for delinquents, social services for specialised groups. It is intended to integrate social work thought and practice into the entire social order and expand the scope of social service throughout the country through the establishment of these physical units. It would thus be possible to assist and help the communities to organise themselves and mobilise financial resources to meet their social needs ; to guide and motivate private agencies in the field to enhance their services, expand their programmes and provide services for untackled needs and problems on a voluntary basis ; to expand on-going and existing social welfare services for children, youth, families, delinquents, the handicapped and start new units in the new areas. Most of the services proposed to be undertaken by the Government Departments would be of a promotional and preventive character. The curative and rehabilitative aspects of social welfare will mostly be undertaken by the private agencies.

10. Social welfare units will be established in the Basic Democracies institutions at the divison, district and sub-divisional levels in East Pakistan and divisional and district levels in West Pakistan in order to take social welfare activity nearer to the common people who really need it. Trained social workers will be employed in social welfare units of Basic Democracies. They will be required to organise various types of social services and social assistance in their jurisdictions according to the special needs of the communities. The Works Programme will be associated with the development of social service institutions in rural communities.

11. Integrated efforts will be made to organise social welfare work to help the students realise the practical implication of social welfare thoughts. Problems like juvenile delinquency, truancy, mal-nutrition, failures, will be tackled and necessary help will be afforded to students to develop healthy personalities and positive attitudes towards life. Hospitals and Rural Health Centres will be provided with medical social work units. Recreational facilities will be organised both in urban and rural areas. Specific social services will be arranged for backward areas like the tribal areas in West Pakistan and Chittagong Hill Tracts in East Pakistan. Research on social welfare problems will be conducted in collaboration with the social welfare departments of the Universities and findings will be published in Bengali, Urdu and English. Social work Departments will be started in the Rajshahi University and the Peshawar University.

12. Social Welfare institutions and social services like family planning clinics, T. B. Clinics, health clinics, community washing places, adult education centres, vocational workshops, recreational facilities, libraries and reading rooms, co-operative stores will be organised and activities like construction of Pucca drains, community hygiene, filling of ditches

and pits, building of roads, adequate ventilation of houses will be undertaken in the community development programme. Community centres will be constructed in community development project areas where social service institutions have already developed. These centres will become focal point of social education and distribution of social services among the community members.

13. Social Welfare institutions in the field of rehabilitative and curative services will be established in both the Provinces for the handicapped of various categories. These institutions will provide training facilities to professional social workers and serve as model for the benefit of private agencies.

14. Every effort will be made to mobilise community funds to meet social welfare needs. Institutions like community chests, trusts and charity funds will be encouraged at the thana or tehsil level and if possible at the union council level. The distribution of zakat, fitra and other religious and social charities can be institutionalised and utilised for the rehabilitative and curative social services for the needy through an organisd system.

15. Co-operation and assistance of International agencies like UNICEF will be secured in the public and private sectors. This assistance will be utilised primarily for education, research and training in social welfare and also in the form of vocational therapeutic and rehabilitative equipment for centres and service institutions for the socially and physically handicapped.

Employment of Professional social Workers

16. Attempts will be made to employ professional social workers in all social welfare jobs including planning, organisation and administration of social welfare services and community development. It is estimated that 2,500 trained workers will be required to man the plan programme efficiently. A number of seasonal jobs for semi-skilled and un-skilled labour will also be created under the social welfare sector during the Third Plan period.

Legislation

17. It is proposed to examine the existing laws—*vis-a-vis* social service policies and programmes and to improve upon them or suggest new ones where needed. There seems to be need for effective legislation in the fields of child welfare, juvenile delinquency, social assistance and working of the private agencies.

Annexure I

Financial Allocation for Social Welfare By Executing Authorities and Regions.

(Million Rs.)

Sl. No.	Sub-Sector	East Pakistan	West Pakistan	Centre	Private	Total
1.	Administration ..	4·0	1·5	..	..	5·5
2.	Research and publication.	2·0	1·0	..	..	3·0
3.	Training	5·0	5·0	..	..	10·0
4.	Urban community development.	10·0	15·0	..	..	25·0
5.	Financial and professional assistance to voluntary agencies, Universities, Colleges.	..	..	20·0	..	20·0
6.	Socia services for children.	10·0	7·5	..	5·0	22·5
7.	Social services for youth.	10·0	7·5	..	5·0	22·5
8.	Social services for families.	8·0	5·0	..	5·0	18·0
9.	Medicinal social work.	4·0	4·0	..	..	8·0
10.	School social work ..	5·0	5·0	..	..	10·0
11.	Recreational services for masses.	4·0	2·5	..	..	6·5
12.	Social service and model institutions for socially and economically handicapped.	10·0	5·0	..	10·0	25·0
13.	Social service and model institutions for physically handicapped.	12·5	7·5	..	10·0	30·0
14.	Social services for delinquents.	7·5	3·5	..	5·0	16·0
15.	Social assistance units.	5·0	5·0	..	..	10·0
16.	Social services for specialised groups.	3·0	5·0	..	..	8·0
	Total ..	100·0	80·0	20·0	40·0	240·0

Annexure II

Physical Targets of Social Welfare Sector

Sl No	Sub-Sector	East Pakistan	West Pakistan	Centre	Total
1.	Administration	58	52	..	110
2.	Research and publication.	5	3	..	8
3.	Training	18	15	..	33
4.	Urban community development.	52	80	..	132
5.	Social services in rural communities.	118	94	..	212
6.	Financial and professional assistance to voluntary agencies, Universities, Colleges.	..	..	400	400
7.	Social service for children.	25	22	..	47
8.	Social services for youth.	47	22	..	69
9.	Social services for families.	17	12	..	29
10.	Medicinal social work ..	25	27	..	52
11.	School social work ..	65	50	..	115
12.	Recreational services for masses.	20	20	..	40
13.	Social services and model institutions for socially and economically handicapped.	15	10	..	25
14.	Social services and model institutions for physically handicapped.	22	14	..	36
15.	Social services for delinquents.	49	21	..	70
16.	Social assistance units ..	18	13	..	31
17.	Social services for specialised groups.	10	15	..	25
	Total ..	564	470	400	1,434

CHAPTER 18

MANPOWER AND EMPLOYMENT

Full employment is an ultimate objective of the Perspective Plan (1965—85). The intermediate aim during the Third Plan is to prevent any aggravation in the existing employment situation by finding at least 4.5 million new job opportunities. All available facts and figures indicate that the total number of new job opportunities has not kept pace with the increase in the labour force in the last ten years : that the unemployment and under-employment situation has, in fact, been deteriorating. If any further deterioration is to be avoided, the programmes under the Third Plan must absorb at least the equivalent number of new entrants to the labour force during the five year period. During the Fourth Plan period the employment potential of new investments must exceed the addition to the labour force and start absorbing the backlog of unemployment if the objective of full employment is to be achieved by the end of the Perspective Plan.

2. According to the 1961 Census, and some subsequent estimates, the total labour force in the country was about 33 million in 1961. This comprised about 56 per cent of the total male population and about 9 per cent of the female population. The distribution of the labour force between agricultural and non-agricultural employment is estimated to be in the ratio of 3 : 1. The increase in the labour force over the Plan period is expected to be about 4.2 million.

I. EMPLOYMENT POTENTIAL OF THE THIRD PLAN

3. Detailed studies to determine the impact on employment of investments proposed in each sector during the Third Plan period are still in progress but on the basis of work so far done, the total employment likely to be generated by the proposed investments between 1964-65 and 1969-70 is estimated to be 4.5 million.

4. The estimate is based on the current technological pattern, which can be modified within certain limits to generate more employment. In some industries like petrochemical and steel, it is necessary to use high productivity techniques. But in some industries it is possible to use more labour intensive techniques without sacrificing overall efficiency in production. The scope for substitution is much greater in sectors like irrigation, housing and other activities involving large-scale construction and earth work. In actual practice the adoption of labour intensive techniques has not been significant because of the wide-spread influence of Western techniques, through foreign consultants, and training of Pakistani engineers and technicians in Western institutions. If deliberate measures are adopted to enforce methods which will make the

maximum use of available manpower resources, it may be possible to exceed the target of 4.5 million job opportunities with the investments proposed under the Third Plan.

5. The evaluation of the Works Programme has shown it's great significance for the employment objectives of the country, because here the capital required to provide employment to one worker is only Rs. 600. By enlarging the size of the Works Programme in subsequent Plans the employment potential of the total investment can therefore be raised substantially without sacrificing the advantages of large scale production and high productivity techniques in sectors where these considerations are of over-riding importance.

Requirements of trained manpower

6. Of all the resources required for development, perhaps the most crucial at present is trained manpower. The country is faced with an acute shortage of technically trained manpower at all levels. Accurate data on the shortages and surpluses by occupations and by industries are being collected, but it can safely be assumed that the demand for skilled workers and trained personnel will in many areas increase faster than the supply. Looking at the general pattern of development it can be safely assumed that during the Third Plan period there will be an acute shortage of highly educated professional manpower such as scientists, agronomists, veterinarians, engineers, doctors, economists and statisticians. Their shortage will have both qualitative and quantitative aspects, and is expected to be magnified by their relative immobility. The rapid growth in the demand for technicians, nurses, agricultural assistants, technical supervisors, and other sub-professional personnel is likely to become more critical than the shortage of highly qualified professional personnel because the requirements for this category of manpower generally exceed those for senior professional personnel. The new persons who are qualified to enter a technical institute are usually also qualified to enter a university, and they prefer the latter because of the higher status and pay which is accorded to the holder of a university degree. There are often fewer places available in institutions providing intermediate level training than in the universities. The demand for skilled persons in manufacturing and construction, and in the clerical, sales and service fields will also increase.

7. Teachers have almost always been in short supply and many of them tend to leave the teaching profession, whenever more attractive jobs become available in government departments, or private enterprise. The scarcity is generally most serious in secondary education, and particularly acute in the fields of science and mathematics. This shortage of competent teachers is a major bottleneck in the entire process of the

development of human resources. The demand for craftsmen of different kinds and certain categories of clerical personnel such as bookkeepers, personal secretaries, stenographers and business machine operators, may increase at a rate faster than the supply. Finally, several other miscellaneous categories of personnel may also be in short supply, such as radio and refrigeration mechanics and accountants.

II. POLICIES AND PROGRAMMES

Employment promotion

8. Measures to solve the problems of unemployment, under-employment and very low incomes will be expanded and strengthened.

9. *Works programme.*—Among the specific measures which have so far shown promising results the rural works programme stands out clearly. The programme will be expanded in scope to include larger and more complex works.

10. *Measures in industry and agriculture.*—The measures for employment promotion in organised industries in the urban areas will continue and include fuller utilization of existing industrial capacity by the introduction of multiple shifts and removing of handicaps, such as non-availability of raw materials and spare parts. Other measure will be the development of handicrafts, cottage and small scale and feeder industries ; suburban activities to meet the expanding demand for meat, eggs, vegetables, and expansion of health, education and training programmes to provide employment to the educated unemployed.

11. The general measures for the rural areas will include provision of suitable assistance and guidance for the establishment of demonstration farms along with commercial hatcheries and development centres for the propagation of poultry farming, sericulture, livestock rearing and other activities allied to agriculture, such as forestry and fishing.

12. *Other measures.*—International forums should be fully utilized for highlighting the adverse effect of the policies regarding tariff and trade unionism of the developed countries on the employment problems of the developing countries and possibilities should be explored for arriving at bilateral agreements for providing overseas employment and training facilities to Pakistanis. Measures for providing greater mobility will include provision of guidance and information to intending migrants for employment to foreign countries, intra-provincial and inter-provincial migrants, promotion of employment of seafarers and promotion of gainful employment of women. This will involve review and redefinition of the functions of the National Employment Bureau and the Labour Attaches abroad and strengthening their existing offices and

creation of labour offices wherever required. The employment opportunities for the seamen should be increased through appropriate training programmes and by helping them in finding employment during temporary spells of their unemployment through co-ordinated procedures to be developed by the Shipping Masters and the employment exchanges.

13. *Research in rural employment promotion.*—The magnitude of the employment problem in rural areas is so great that in spite of all efforts so far undertaken the situation is becoming acute at least in terms of absolute numbers. There does not exist sufficient knowledge about the organisation and methods of promoting employment which can serve as a guide in the development of a sound employment policy for rural areas. Pilot projects will, therefore, be undertaken within fairly limited rural areas over a number of years to develop and demonstrate methods of expanding rural employment opportunities through more labour intensive methods of farming, the development of activities closely related to agriculture, promotion of rural industries, undertaking of special rural works programmes and encouragement of other promising avenues of employment. The results achieved will be evaluated and conclusions drawn as to the applicability of methods and procedures tested in the pilot areas to regional and national programmes of rural employment promotion. The projects will be undertaken in selected areas with the help of Union Councils. International assistance in undertaking such projects can become available from U.N. Special Fund, the I.L.O. and the F.A.O.

Utilization and development of trained manpower

14. The critical shortages of high level manpower will be met by undertaking the following specific measures :

(i) Registration of high level manpower will be undertaken with assistance of educational, scientific and professional bodies to provide centralized information on the availability and qualifications and for the utilization and development of high level manpower.

(ii) The National Employment Bureau will be strengthened to undertake comprehensive registration of highly qualified Pakistanis living abroad, to disseminate particulars about them and to furnish information on suitable job opportunities in the country.

(iii) University placement bureaus will be set up in all the universities for vocational guidance and employment counselling, for providing part-time employment to students and whole-time employment after their passing out and furnishing particulars of high level manpower.

15. There is need for retraining the released defence personnel for civilian employment, training of self-employed artisans and craftsmen and for the development of construction skills for rural Works Programmes. The training capacity of the existing skilled labour and instructor training centres will be doubled. Besides, four new centres each with the capacity of 350 trainees and a marine diesel training centre for 250 trainees will be established in East Pakistan and 6 new centres for 350 trainees each will be set up in West Pakistan. In order to enforce the Apprenticeship Training Ordinance, 1962, the existing four Regional Apprenticeship Directorates in East and West Pakistan will be improved and expanded and four new Regional Directorates will be provided in East Pakistan and seven in West Pakistan.

16. *Craftsmen's technological information service.*—For the benefit of the self-employed artisans and craftsmen information on intermediate technology relating to various trades and crafts will be assembled at one place and will be disseminated through mobile training and demonstration workshops for rural areas, and by arranging evening classes in the existing training institutions in urban areas. Audio-visual aids can particularly play an important role in this type of training programme. Four pilot mobile demonstration and training workshops will be organised in East Pakistan and six in West Pakistan on industrial rather than class room lines, and will be partially self-supporting since they will also perform services to the community on a semi-commercial basis.

17. *Development of construction skills.*—There is acute shortage of elementary construction skills in the country particularly in rural areas due to Works Programme. It is, therefore, necessary to undertake training of mason mistries, baildars, blacksmiths, carpenters, plumbers, fitters and welders in rural areas. These construction skills can be provided under a coordinated training programme in co-operation with Basic Democracies through mobile demonstration-*cum*-training workshops, training-*cum*-development corps, labour cooperatives on voluntary basis and on the job training by contractors.

Employment exchange system

18. The system of employment exchanges which consists of 5 offices in East Pakistan and 15 offices in West Pakistan needs to be thoroughly reoriented and reinforced with primary emphasis laid on undertaking new functions like employers' visitation programme, determination of manpower needs in local areas, employment counselling, provision of specialised services to agricultural workers and rural areas of seasonal employment, supply of unskilled labour for engineering works, solution of the problems of labour employed through contractors, *ex*-servicemen, port and dock workers and seamen. Six new offices are proposed to be set up in East Pakistan and twenty in West Pakistan to provide better geographical coverage after the existing ones have been improved and

reorientated. The rural employment service should establish contacts with the rural workers through the various tiers of Basic Democracies. Employment counselling by employment exchanges should be supplemented with vocational guidance by educational authorities.

Management development, productivity and workers' education

19. *Management development.*—The existing Management Development Centre in East Pakistan and W.P.I.D.C.'s Institute of Management in West Pakistan will be expanded in their scope particularly in management functions and improvement of production techniques. The Centre at Dacca may be attached with the E.P.I.D.C. so that it can have a measure of autonomy and effectiveness and exert creative influence over industrial enterprises.

20. *Productivity centre.*—One industrial productivity centre in each Province may be established to train productivity specialists and organise programmes such as work study, production planning and control, quality control etc. and practical demonstration in industrial undertakings.

21. *Workers' education.*—The two existing trade union institutes, run by the Pakistan Workers' Educational Society suffer from lack of finance. Although it will not be advisable to place the institutes under the administrative control of the Government, substantial grants should be provided to assist them in their activities. Other national trade union organizations should be associated with them and they may be encouraged to set up a third institute in the northern region of West Pakistan. The existing National Institute of Labour Administration Training in Karachi, the Industrial Relations Institute in East Pakistan and a similar Institute currently being set up in West Pakistan should be further improved and expanded. There is also need for a new Institute of Industrial Relations in the southern region of West Pakistan.

22. A Government co-ordinating agency with an advisory body composed of the Government, employers' and workers' organisations will be established to undertake critical study of various central, provincial and local programmes in the field of management, workers' training and productivity. The need of setting up parallel institutions with the same objectives and programmes as those of the existing institutes should be very carefully examined by the proposed body in the light of the total training needs of the country.

23. *Industrial educational films for worker's education.*—The industrial educational films have been found very useful in imparting education to industrial workers in East Pakistan. More mobile units will be provided in both the Provinces.

Safety, hygiene and other conditions of work

24. Protective labour legislation dealing with safety, health, welfare, hours of work, weekly rest, rest-intervals, minimum age of employment and special provisions for the employment of children and women require thorough review to bring it in conformity with the changing socio-economic conditions in the country. There is particular need of improvement in the hours of work for railways and road transport workers and for removing malpractices in the wage system openly practised by many road transport companies. Moreover, emphasis should be given to enforcement of satisfactory physical standards at work places, industrial sanitation and health, control of contract labour and elimination of child labour in non-agricultural employment.

25. Administrative measures immediately required are strengthening of Factory Inspection by at least 20 officers in East Pakistan and 45 in West Pakistan. In coal mine areas of West Pakistan facilities like water supply stations and mine rescue stations should be provided. The existing Mines Inspectorate in West Pakistan should be strengthened and a Bureau of Safety Standards in each Province should be set up to deal comprehensively with programme of industrial safety and occupational health.

Industrial relations

26. The existing laws governing industrial relations need to be amended so as to reduce to a reasonable minimum the existing number of 27 industries included in the Industrial Disputes Ordinance as public utility service, which almost takes away the workers' right to organise which is inherent in the right to bargain collectively. Another clear provision needs to be included in the industrial relations legislation to make collective bargaining a necessary first step for the settlement of industrial disputes. Strikes and lockouts which are not preceded by an attempt at collective bargaining may be treated as illegal under the Industrial Disputes Ordinance. The Trade Unions Act may also be amended to provide specifically for the registration of industry-wise federation of labour unions so as to check multiplicity of trade unions.

27. The Industrial Disputes Ordinance is concerned with conciliation of labour disputes when these have already arisen rather than with prevention of disputes. There are 23 officers in East Pakistan and 14 officers in West Pakistan. The minimum additional requirement of each Province is 20 officers. There should be three more industrial courts in East Pakistan and 5 more in West Pakistan and there should be a Legislative Cell to watch the implementation of awards of the courts and collective bargaining agreements.

Wages, social security and industrial welfare

28. *Wages.*—The Payment of Wages Act which has very limited application, should be amended to cover all employees. The functions of the Central Minimum Wage Council and those of the Projects Labour Committee and the Co-ordination Committee at the Centre should be reviewed in order to achieve a co-ordinated approach to the solution of national wage problems and policies. Wage increases should go hand in hand with improvements in productivity to provide incentive for the development of skills. The controversy over payment of bonus requires to be resolved after carefully examining the problem.

29. *Social Security.*—The Social Insurance Ordinance, 1962, providing for insurance against employment injury, maternity and sickness is being amended by the Provincial Governments to provide, among other things, the setting up of provincial institutions and local offices for administration of the social insurance programme for industrial workers. An integrated national insurance system, covering these provisions together with the provisions of superannuation benefits through pooling and extension of existing provident funds should mature during the Third Plan period.

30. *Housing for industrial areas.*—There is need to co-ordinate housing and employment policies in order to increase the geographical mobility of labour. To avoid exploitation of labour by employers and for developing integrated communities special housing corporations will be set up in each Province to undertake construction of houses in industrial areas to meet the requirements of industrial workers and low income groups of population. Employers may be asked to contribute part of the funds to meet the requirements of industrial workers.

31. *Organization of co-operative societies for industrial workers.*—Consumer co-operative and thrift societies will be organised for the benefit of industrial workers and may be closely integrated with the programme of industrial welfare centres.

32. *Industrial welfare centres.*—Eighteen welfare centres will have been completed in East Pakistan and 4 centres in West Pakistan by the end of the Second Plan. After expanding the activities of these centres, 12 new centres will be established in East Pakistan and 17 centres (including 7 for coal mining areas) in West Pakistan.

Analysis, fact finding and research

33. Improved arrangements for programme analysis and evaluation, labour research and collection of essential manpower information will be made during the plan period.

Financing

34. Allocation for the proposed programme is Rs. 170 million, Rs. 150 million in the public sector and Rs. 20 million in the private sector, which will be divided between East Pakistan, West Pakistan and Centre as indicated in the following table :

TABLE

Distribution of allocation in the Manpower Sector

(Million Rs.)

Programme	Total	Tentative Allocations					
		East Pakistan		West Pakistan		Centre	
		Public Sector	Private Sector	Public Sector	Private Sector	Public Sector	Private Sector
1	2	3	4	5	6	7	8
I. Programme for utilization and development of trained manpower.	65	30	5	25	5	..	..
II. Management development, productivity and workers' education.	30	15	1	10	1	3	..
III. Employment service.	8	5	..	3	..	..	..
IV. Social security and industrial welfare.	31	10	4	10	4	3	..
V. Safety, hygiene and other physical and related conditions of work.	13	5	..	5	..	3	..
VI. Industrial relations.	10	5	..	5	..	..	..
VII. Analysis, labour research and statistics.	5	3	..	1	..	1	..
VIII. Miscellaneous.	8	7	..	1	..	..	..
Total ..	170	80	10	60	10	10	..

NOTE :—An additional public sector allocation of Rs. 30 million for initiation of industrial workers housing corporations is included in the physical planning and housing sector.

CHAPTER 19

CO-OPERATION

In an independent society wedded to a democratic way of life, co-operation encompasses more than a series of activities organized on co-operative lines. It combines freedom and economic opportunity for the weaker and poorer segments of the society with advantages of large-scale organization and management. It distributes the fruits of growing economic activities over a wider section of the population and helps reduce the imbalance in the distribution of wealth, which is bound to result in a free-enterprise economy during the initial stages of its growth. Properly conceived and evolved, co-operation can transform the entire social structure and accelerate the process of social and political change so vital to the real objectives of economic growth.

2. The co-operative movement was introduced in this sub-continent in 1904 and during the following 43 years, upto the time of Independence it had a chequered history. It achieved notable successes in many regions, particularly in the former Punjab, but it also encountered many conspicuous failures. After Independence the movement received a greater impetus in fields like rural credit and urban housing. The number of co-operative societies during the First Plan period did not increase significantly, but there was an appreciable increase in the working capital of the societies and the Co-operative Banks. The Second Plan laid great emphasis on the need for the rehabilitation and development of the co-operative movement at all levels of co-operative institutions *i.e.,* the primary societies, the secondary societies (Central Co-operative Banks) and the Appex Banks. This programme is being implemented under two separate schemes in both the provinces. At present, West Pakistan has about 25,000 societies of various types with a capital of Rs. 900 million and in East Pakistan, where the movement has started gaining momentum, there are about 4,000 societies. But the programme as a whole has not yet acquired the broader perspective outlined in the earlier paragraph.

3. The Third Plan provides for a considerable expansion in the size and scope of the co-operative programme, but the success of the programme in its broader scope will depend a great deal on improvements in the institutional framework of the programme.

Agricultural Co-operatives

4. The credit co-operatives form the core of the co-operative movement in the agricultural sector and will, therefore, receive much greater attention during the Third Plan priod. Since the basic policy is to link credit with marketing, the programme for the development of the co-operative credit and marketing structure will be intensified to cover

twice the number of primary and secondary societies reorganized under it during the Second Plan period. The object will be to cover through co-operative credit the bulk of the short-term credit needs, and a considerable portion of the medium-term requirements, leaving only long-term credit needs to be covered by the Agricultural Development Bank. Following the amalgamation of the Agricultural Development Finance Corporation and the Agricultural Bank of Pakistan into one organization *viz.*, "Agricultural Development Bank of Pakistan" it is now necessary to co-ordinate the activities of the co-operatives with those of the Agricultural Development Bank. This objective is being achieved to some extent through the Rural and Co-operative Credit Advisory Committee appointed under the Chairmanship of the Governor, State Bank of Pakistan.

5. The experience gained from the operation of the co-operative farming societies at Multan and Comilla indicates that the programme can be extended during the Third Plan period. Co-operative farming, with the farmers retaining individual holdings will be started in other areas to accelerate the modernization and mechanization of cultivation practices. Similarly organization and development of milk producers' co-operatives with dairy plants will be encouraged.

Housing Co-operatives

6. The urban population is steadily rising particularly in the industrial and commercial centres. During 1951—61 there has been an annual increase of 5.64 percent in urban areas as compared to 1.98 percent in rural areas. But the construction of houses has not increased at the same rate. By the end of Second Plan about 255,000 families in urban areas will still remain shelterless.

7. During the First Plan and even earlier (1950—55) considerable progress was made in the field of co-operative housing, but no specific provision was made for co-operative housing in the Second Plan. Meanwhile local Improvement Trusts and Development Authorities replaced the co-operative housing societies in large cities and got big allocations in the Plan. This resulted in abnormal rise in the cost of urban land development and construction of individual houses with heavy over-head costs and middle-men's profits and a slower pace of development. Thus an average man in spite of acute housing shortage finds it difficult to finance the construction of his own house.

8. It is proposed that co-operative housing societies should receive Government support in the shape of cheap loans, procurement of building materials and other incentives to boost investment in house-building. In the rapidly growing industrial and commercial towns and cities the Provincial Governments may organise Central Co-operative Housing Societies which, with the help of long-term loans, will be able to purchase house

sites on reasonable terms and procure building materials on a large-scale for supply to the housing societies.

9. The Third Plan allocation for house building activities in the private sector is Rs. 3,150 million, a part of which may be devoted to co-operative housing societies. Tentatively about Rs. 110 million may be a reasonable estimate of requirements for co-operative housing, to be shared equally between the two provinces.

Consumers' Co-operatives

10. A shortage of consumer goods gives traders a chance to charge exorbitant prices. The best way of combating this danger is to develop a healthy and strong co-operative chain backed by strong wholesale organisations. The Consumers' Co-operatives not only provide their members with consumer goods and services at fair prices but also secure the benefits of large-scale operations. It is proposed that consumers' co-operatives backed by wholesale organizations will be set up in big towns and cities.

Industrial Co-operatives and Artisan Colonies

11. Co-operative efforts can be of great benefit to workers and artisans in the establishment of small-scale industries and even of fair-sized factories jointly owned and operated by the workers and artisans, particularly in fields where modern technology and large-scale operations are not important. In the Third Plan, industrial co-operatives are expected to play an increasing role not only in the promotion of economically viable small and medium-sized industrial units but also in providing production facilities, small industrial estates, artisan colonies, supply and marketing services, and credit facilities. Increased efforts will have to be made to set up industrial co-operatives in comparatively under-developed regions in the country.

Transport Co-operatives

12. With increased investments in roads and improvement of the inland river communication numerous problems in connection with regulation of traffic and efficiency of transport systems have already become acute. One of the main reasons is that most of the motor transport vehicles and launches are owned by a large number of petty individuals whose resources are inadequate for maintaining modern repairing and servicing stations and replacing old units. In order to increase the efficiency of the transport system and improve the economic conditions of the persons engaged in it, it is necessary to organise them on co-operative lines.

13. Some transport co-operatives have already started functioning in the country, but they are still in the formative stage. In the Third Plan, Transport Co-operatives for buses and trucks, taxis and scooters, and motor launches will be established. Once sufficient number of transport societies have been organised, steps should be taken for co-ordinating their activities by setting up a central body in each province.

Co-operative Education, Training and Research

14. Some of the main reasons for the inadequate and uneven growth of co-operative movement in Pakistan are lack of general education among the masses of the population required for imbibing the co-operative spirit, and understanding the principles and practice of co-operation, lack of sound training of the personnel of the co-operative department, absence of systematic research which is essential for the successful application of the co-operative principles and practices to local conditions. Along with the gradual introduction of compulsory primary education, efforts to infuse the spirit and principles of co-operation both in the rural and the urban areas of the Co-operative Institutes should be stepped up through talks, illustrated books, and booklets, and films.

15. In the field of training, a Co-operative College in West Pakistan has started functioning. In East Pakistan also the construction of a Co-operative College at Comilla has been completed. In West Pakistan a number of Co-operative Training Institutes have already started functioning. It is proposed to establish eight such training institutes in East Pakistan, during the Third Plan.

16. The training programme should include not only the personnel of the Co-operative Departments but also the members of the Managing Committees and the Secretaries of the primary societies although the training for the latter group should be for a shorter duration.

17. General co-operative principles and practices need to be adapted to local conditions. At present this is not being done sufficiently. It is, therefore, necessary to set up suitable research organisations to study the problems of application of the co-operative principles and practices to local needs, to initiate experiments and to demonstrate the results of such studies and experiments.

CHAPTER 20

WORKS PROGRAMME

The Works Programme as a technique of socio-economic development of rural areas has taken shape during the Second Plan and is going to play a vital role in regenerating rural economy during the Third Plan. The Works Programme initiated in 1961, was actually taken up in 1962-63 outside the scope of the Plan with an allocation of Rs. 100 million for East Pakistan. The whole amount was effectively utilised within a period of 6 months. Encouraged by this success, a sum of Rs. 300 million was allocated during 1963-64 : Rs. 200 million to East Pakistan and Rs. 100 million to West Pakistan. The allocation for 1964-65 has been increased to Rs. 400 million : Rs. 250 million to East Pakistan and Rs. 150 million to West Pakistan.

The Need for Rural Works Programme

2. Pakistan's overpopulated economy has a predominant rural bias with about 85 per cent of her population still living in rural areas dependent on agricultural pursuits and contributing about 45% of the GNP. The bulk of the investment in development works since Independence has, however, been concentrated in the urban areas which has resulted in a continuous shifting of resources from the rural areas. Consequently unemployment in the agriculture sector has been mounting and the rate of seasonal under-employment is one of the highest in the world.

3. The first comprehensive effort to regenerate rural economy was started in 1953 through the Village Agricultural and Industrial Development (V-AID) Programme. This Programme suffered from lack of coordinated effort at the Union level and achieved only limited success.

4. To recreate effective units of local self-Government for rural development, the Basic Democracies were created in 1959-60. Due to lack of resources the programmes of the Basic Democracies languished in the beginning.

5. The Works Programme was first conducted as a pilot project in Comilla Thana under the direction of the Pakistan Academy for Rural Development (PARD) during 1961. The Programme was devised in the light of the experience gathered in the past. The Local Union and the Thana|Tehsil Councils consisting of people's representatives were actively associated with the Works Programmes through a number of Project Committees. The Projects were prepared and approved by the selected Committees who belonged to the local areas and were familiar with local conditions. The confidence of the farmers was, therefore, more readily gained. Sufficient funds were provided to allow the Councils to take a modest step forward in the field of development and creation of rural economic infra-structure. The results of the Pilot pro-

ject at Comilla were so encouraging that province-wide programmes were undertaken first in East Pakistan and in the next year in both East and West Pakistan.

Objectives of the Works Programme

(a) *Utilization of Surplus Manpower*

6. Under-employed manpower is one of the largest potential resources of this country. In a democratic country such labour cannot be mobilized by compulsion. Nor does the economy allow for rapid industrialization to permit the shift of the under-employed and unemployed agricultural population to non-agricultural employment.

7. Though estimates vary about the size of the pool of the unemployed and under-employed, it is clear that at least one-fifth of the labour force is actually seeking employment and would welcome the chance to work on public projects particularly during the idle-periods of the year. It is estimated that during the Third Plan the labour force will increase by approximately 4.2 million persons. Of these over one million will be in the Agriculture Sector. This, taken with the backlog of unemployed persons, would make the task of the absorption of the under-utilized labour force a colossal one. In East Pakistan during the dry months of winter at least three-fourths of the farmers are unemployed which means in most cases subsistence living, verging on starvation and distress. A large number of rural un-employed people move to and from between the villages and urban areas with little chance of employment and this constitutes a dangerous element of social instability. Such large scale unemployment not only increases the distress in rural areas but also leads the victims to growing frustration, bitterness, cynicism and ultimately to political instability fraught with disastrous consequences.

8. The Works Programme will mobilise the idle manpower by providing wages for economically productive public utility work. It will offer over one million additional job opportunities.

(b) *Creation of Rural Economic Infra-structure*

9. Since Independence, most of the development works have been concentrated in urban areas and the rural areas have been in a state of depression with large-scale un-employment and under-employment, absence of capital works and a moribund local self-government system.

10. In East Pakistan the flat agricultural land, with 100 inches of rain-fall during the summer and with long dry winters, requires a vast net-work of drainage and irrigation channels, embankments, regulators and culverts. And it require their continuous maintenance, in the

absence of these a 50% loss of agricultural production is not uncommon. At least 4/5ths of the villagers are isolated from the main markets and roads, with a primitive agriculture and backward and stagnated social conditions. The deterioration of rural economy has led to social and administrative disintegration of rural West Pakistan ; the problems of salinity and waterlogging, and arid zones and difficult communications lead to conditions of life not very much better.

11. Economic growth needs an infra-structure of capital works and financial institutions and resources which stimulates entrepreneurs and makes the desired development possible. This is precisely what rural Pakistan lacks. And it is this the Works Programme seeks to supply.

12. The creation of social capital like schools, dispensaries, marketing centres, community houses and communications will make the rural community aware of the significance of the country-wide development effort which is being made. The increasing income of the farmers will tend to increase the demand for consumer goods produced by the urban and rural industries. Industrial development in Pakistan has so far depended largely on demands of the urban market. If the pace of industrialisation is not to slow down the rural market must grow. With increasing rural electrification cottage industries will be able to produce better and cheaper goods, and by strengthening rural economy, expand the demands of the rural market and help quicken the tempo of national economic growth.

(c) *Strengthening of Local Self-Government*

13. The Works Programme has vitalized the local bodies and given opportunity to local talent for leadership, organization and administration. The representatives of various Government Departments work together with the local bodies in planning and executing the development programmes and thus a new effective pattern of rural administration is evolving.

(d) *Planning from Below*

14. The planning and execution of programme rests exclusively with the Councils concerned. Some of the progressive Councils have already prepared three year development plans under which annual programmes are being executed. The local Councils will prepare five year programmes beginning from 1965-66 for their respective areas. These programmes will be dovetailed to form the Provincial Works Programme.

15. As the Works Programme is going to include more complicated types of projects during the Third Plan, the need for sound local planning will also become imperative. It is, therefore, necessary that local nuclei for planning are created for each Union, Thana/Tehsil and District. A

proper system of regional planning should be organised for co-ordinating the local Council's programmes. The conditions of rural areas are so infinitely diverse in physical, social and economic conditions and the needs so numerous that the national and provincial planning agencies preoccupied with larger issues of national planning are apt to lose sight of these local details. The Works Programme by initiating the process of planning from below will fill this gap and by creating a sense of participation will release the latent energies of the vast rural population through constructive channels for strengthening the national effort for economic and social progress.

Progress of Works Programme during the Second Plan

16. The Programme of 1962-63 in East Pakistan showed more encouraging results. A preliminary evaluation shows that in physical terms 21,262 miles of roads and several thousand bridges and culverts were constructed or repaired; 1,883 miles of canals were excavated or re-excavated, 1,018 miles of embankments were raised or repaired. Approximately, half a billion cubic feet of earth was moved and over 3 million man-months of work was provided for the un-employed and under-employed rural population of East Pakistan by different executing agencies. A conservative estimate of 5% saving of Aus and Aman Crops from flood would mean Rs. 140 million additional production and income for the farmers. The newly constructed net-work of rural communications by opening up vast economically backward areas to markets and linking them with administrative and educational centres has acted as a fillip to their economy. Although the accomplishments cannot be estimated precisely, it is evident that in physical terms the programme has yielded returns many times over the investment. The indirect impact of the Programme on the rural community by way of strengthening rural administration and inspiring enthusiasm for planned development is of even greater and more far-reaching importance to the economic growth of the country.

17. In East Pakistan, Comilla is used as the experimental area in which model operations are tried out on the basis of which the provincial programme is organised. As the Union and Thana Councils have gained experience in planning, organizing and implementing their programmes, more funds have been allocated to them than to the District Councils and the Municipalities. The Programme has ranged from simple works like construction of roads, flood control and minor irrigation projects to more complicated works like construction of pucca bridges and culverts, sluice gates and regulators, brick-surfaced and metalled roads, community and school buildings and Thana Training and Development Centres. The Councils are preparing their Programmes within the three year local plans with emphasis on preparatory surveys and analyses of local problems, technical soundness and economic justification of the projects.

18. In West Pakistan, the Works Programme was taken in hand effectively in October, 1963. Out of Rs. 100 million, Rs. 25 million have been distributed among the District Councils and Municipalities and Rs. 75 million among the Union and Tehsil Councils. Training and Orientation courses for execution of Works Programme Projects are being imparted in the Basic Democracies Institutes at Lala Musa and Tandojam.

19. The Works Programme will be continued during 1964-65 and the allocation is Rs. 400 million. Many practical problems are being tackled during the Second Plan period preparing the ground for significant expansion in the size and scope of the programme during the Third Plan. Among these problems are the basis of allocating funds to different tiers of Basic Democracies, the method of providing adequate technical help to local councils, the extent of supervision and control and the organisation to exercise it, scientific planning for Thana or Tehsil and District areas, training of officers and local leaders, creation of active interest among the rural people and their mobilization for executing the expanding Work Programme and maintenance of the completed projects.

Allocation for the Third Plan

20. In the Third Plan, the Works Programme will form a separate sector mainly concerned with the growth and development of rural economy. The Plan provides for a Works Programme of Rs. 2,500 million: Rs. 1,500 million in East Pakistan and Rs. 1,000 million in West Pakistan. The allocation for West Pakistan includes a sum of Rs. 50 million for Azad Kashmir and Northern Areas. A tentative distribution of funds is proposed as follows :—

(Million Rs.)

	East Pakistan	West Pakistan	Total
Agriculture	280	220	500
Water and power (Minior irrigation and drainage) ..	260	100	360
Transport and communications (Roads)	500	360	860
Physical planning and housing	300	200	500
Education and training	100	80	180
Health	30	20	50
Social welfare	30	20	50
Total ..	1,500	1,000	2,500

The executing agencies should prepare their respective five-year programmes in accordance with local needs and priorities. The Programme is expected to cover such projects as rural electrification, minor irrigation works, flood control, rural communication, supply of drinking water, community houses, schools, markets, dispensaries, grave-yards and Thana or Tehsil Training and Development Centre. Councils at Union level will be expected to mobilize additional resources from local taxation or through the utilization of voluntary labour to augment the size of the Programme.

Measures to ensure Utilisation of Funds

21. (i) There are two basic requirements for the development of rural areas. An improved pattern of local administration which would organise and conduct training and administration and promote democratic partnership between the Government and the rural community. And the economic and social reorganization of the village so that the villagers can use power and machines and maintain modern institutions like a bank, a ware-house and a school.

(ii) Thana Tehsil Training and Development Centre should be established all over the country to organise comprehensive training in administration and skills and servicing and co-ordinating the activities of the co-operative village units. These centres should be on the Comilla model which consists of a strong central co-operative federation to organise and service village multipurpose co-operatives and a team of departmental officers working as teacher-trainers, and which ensure the closest association of the co-operative structure, the training organisation and the Basic Democracies. This model can be duplicated with necessary adjustments to local conditions.

(iiii) The Training Programme at the Academy for Rural Development and Basic Democracy Institutes should be co-ordinated with the training programme of the Thana Training and Development Centres.

(iv) Comprehensive and well thought-out programmes will have to be prepared for each field in accordance with the broad pattern of priorities for the programme and keeping in view the needs and wishes of the people of the area.

(v) Standard but simple designs and estimates of construction works based as far as possible on local materials will have to be prepared and popularised.

(vi) Regular supply of materials required but not available locally will have to be ensured according to a carefully prepared programme.

(vii) A reasonable proportion of the allocation should be set apart for training and orientation, supervision and evaluation.

(viii) To guard against corruption, a simple but effective accounting method and a system for withdrawal of funds and evaluation of completed works should be evolved and enforced. Wide-spread publicity should be given to the programme, allocation of funds and the standard rates of payment so that the villagers know the amount of money available for a project and the quantity of work to be accomplished.

(ix) To prevent delays in execution of projects, procedures should be envolved for quick reconciliation of differences among several Union Councils, between Union Councils and Thana/Tehsil Councils and among Thana/Tehsil Councils.

APPENDICES

Appendix A

(*See* Ch : 4 : Para. 18)

PHYSICAL TARGETS OF THE THIRD FIVE-YEAR PLAN

	Unit	Bench-mark production in 1964-65	Third Plan Target 1969-70
1	2	3	4
AGRICULTURE :			
(*a*) *Food grains*			
Rice	Thousand tons	10,600	13,400
Wheat	„	4,330	5,305
Minor food grains	„	1,295	1,559
TOTAL FOOD GRAINS	„	**16,225**	**20,264**
(*b*) *Others*			
Sugarcane	„	20,800	27,802
Gram and pulses	„	1,025	1,365
Oil seeds	„	1,248	1,633
Fruits and vegetables	„	4,100	5,260
Jute	Thousand bales	6,600	8,000
Cotton	„	2,218	3,000
Tea	Million lbs.	62	79
Tobacco	„	215	286
INDUSTRY :			
(*a*) *Food Manufacturing* :			
White sugar	Thousand tons		640
Edible vegetable oils	„		300
Cigarettes	Million		30,000
(*b*) *Textile* :			
Cotton spinning	Million lbs.		620
Jute Manufactures	Thousand tons		720
(*c*) *Paper and Board*			
Writing and printing paper	Thousand tons		100
Boards	„		70
Newsprint and mechanical paper	„		70
(*d*) *Chemicals* :			
Nitrogenous fertilizers (in terms of ammonium sulphate).	„		2,500
Phosphatic fertilizers (in terms of triple phosphate)	„		550
Soda ash	„		150
Caustic soda	„		75
Sulphuric acid	„		400

	Unit	Bench-mark production in 1964-65	Third Plan Target 1969-70
1	2	3	4
INDUSTRY *contd.*			
(*e*) *Non-Metallic Minerals* :			
Cement	Thousand tons		5,000
(*f*) *Basic metal* :			
Steel	Thousand ignot tons		1,200
(*g*) *Electrical Machinery* :			
Wires and cables	Thousand tons		35
(*h*) *Machinery*			
Machine tool	Million rupees		100
Heavy machinery (complex). ..	,,		400
FUELS AND MINERALS :			
Natural gas	Thousand million cu.ft.		200
Coal	Thousand tons		3,000
Sea salt	,,		375
Rock salt	,,		275
Chromite	,,		60
Silica sand	,,		30
Limestone	,,		5,000
Gypsum	,,		180
Petroleum (Crude oil)	Million imperial gallons.		180
		Second Plan 1960-65	Third Plan 1965-70
WATER AND POWER :			
(*a*) *Water* :			
Area irrigated	Million acres		3·6
Area improved (includes drainage, flood protection and other improvements).	,,		11·0
Bunds raised and strengthened.	Miles		1,500
(*b*) *Power* :			
New capacity installed	Thousand K. W.		1,365
Transmission lines strung ..	Circuit miles		9,000
Villages electrified	Numbers		8,000
Railway mileage electrified ..	Miles		177

	Unit	Second Plan 1960-65	Third Plan 1965-70
1	2	3	4
TRANSPORT AND COMMUNICATIONS:			
(a) *Railways* :			
Locomotives	Number	217	277
Passenger coaches	,,	673	1,068
Wagons	,,	14,479	15,655
Other coaching vehicles	,,	229	403
Track renewal	Miles	800	1,200
(b) *Roads* :			
Construction and improvement of Roads.	Miles	2,200	2,100
(c) *Road transport* :			
Buses	Number	6,300	10,400
Trucks	,,	13,000	18,900
(d) *Telegraphs and telephones*:			
Additional telephones	Thousand	60	150
(e) *Post Offices* :			
Additional post offices	Number	1,300	2,000
PHYSICAL PLANNING AND HOUSING :			
1. Units of tubewells in rural areas of East Pakistan.	,,	1,40,000	2,00,000
2. Units of urban plots for houses in Public, semi-public and private sectors.	,,	1,50,000	3,50,000
3. Water supply and sewerage arrangements for urban areas.	,,	10	60
4. Preparation of urban and regional development plans.	,,	8	24
5. Establishment of building trade Schools.	,,	3	10
6. Establishment of industrial workers housing corporation.	,,	—	3
7. Establishment of co-operative housing institute at Lahore and Dacca.	,,	—	2
8. Establishment of appropriate institution for training and research in urban and regional Planning and Development.	,,	—	2

	Unit	Second Plan 1960-65	Third Plan 1965-70
1	2	3	4
PHYSICAL PLANNIG AND HOUSING *contd.*			
9. Establishment of housing and building research centre.	Number	1	2
10. Organisation of physical planning and housing.	,,	—	2

		Bench-mark production in 1964-65	Third Plan Target 1969-70
EDUCATION AND TRAINING :			
1. Primary schools	Thousand	60	123
2. Improvement of primary schools ..	,,	8·6	33·6
3. Children at primary stage ..	Million	7·3	13·85
4. Annual production of primary teachers.	Thousand	19	40
5. Children (lower secondary stage) ..	Million	1·04	1·80
6. Engineering colleges/Universitis ..	Number	7	9
7. Universities (Excluding engineering Universities).	,,	9	19
8. Annual intake capacity of Engineering Colleges (Engineers).	Thousand	1·33	2·0
9. Annual intake capacity of polytechnics (Technicians).	,,	4.1	14·0
10. Annual intake capacity of vocational schools.	,,	8·3	50·0
HEALTH :			
1. Doctors	Number	15,000	19,000
2. Medical colleges	,,	12	15
3. Post-graduate medical Institutes ..	,,	1	2
4. Nurses training centres	,,	18	24
5. Training centres for lady health Visitors.	,,	8	14
6. Hospital beds	,,	33,000	47,000
7. Rural health centres	,,	160	760
8. Nurses	,,	3,200	7,000
9. Lady health visitors	,,	1,000	4,000
10. T.B. clinics	,,	82	300
11. T.B. beds	,,	2,500	3,200

	Unit	Bench-mark production in 1964-65	Third Plan Target 1969-70
1	2	3	4
SOCIAL WELFARE :			
1. Social welfare administrative Units	Number	6	116
2. Research centres	„	2	8
3. Training centres and courses :			
(*a*) Establishment of departments	„	3	6
(*b*) New courses in colleges	„	6	26
(*c*) In-service training courses	„	3	13
(*d*) Social Workers	„	384	2,884
4. Urban community development :			
(*a*) Community centres	„	*Nil*	50
(*b*) Community projects	„	123	205
5. Social service units in rural communities (Works Programme).	„	*Nil*	212
6. Voluntary social welfare agencies	„	500	900
7. Social service units for children	„	6	53
8. Social service units for youth	„	20	89
9. Social service units for families	„	3	32
10. Medical social work units	„	29	81
11. Social work units in schools	„	*Nil*	115
12. Recreation service units	„	*Nil*	40
13. Institutions for socially and economically handicapped.	„	20	45
14. Modern institutions for physically handicapped.	„	12	48
15. Social service units for delinquents	„	11	81
16. Social assistance units	„	*Nil*	31
17. Social service units for specialised groups.	„	*Nil*	25

Appendix B

(Sources of Tables in Chapter I)

1. *G.N.P. with sectoral breakdown* (*Tables* 1, 2 *and* 3)

   1959-60—latest available C.S.O. estimates.

   1964-65—extrapolation of C.S.O. estimates for 1959-60 to 1963-64.

   1954-55—an input-output table of the Planning Commission revised in line with the C.S.O. estimates mentioned above.

   1949-50—existing C.S.O. estimates revised in line with changes in 1954-55.

2. *National Income* (*Table* 1)

   Depreciation taken as a fixed percentage of value added in each sector as used by C.S.O.

3. *Population* (*Tables* 1 *and* 11)

   Reference—a meeting of the working party on population growth decided on a set of estimates (as recorded in the minutes of the meeting issued by the Planning Commission, Karachi, 16 July 1963). Slight adjustments were necessary to determine 1960 and 1964 figures. To estimate 1950 the intercensal growth rate was raised marginally (from 2.2 to 2.3). 1955 was interpolated.

4. *Investment* (*Tables* 4 *and* 5)

   1949-50—*The Strategy of Economic Planning* : *A Case Study of Pakistan* by Dr. Mahbubul Haq (Oxford University Press, 1963).

   1954-55 and 1959-60—" Investment and Output during 1951-52 to 1959-60 " (Mimeographed paper, Planning Commission).

   1964-65—Planning Commission estimates and projections.

   A 10 per cent price deflator was used for 1964-65 except that the estimates for the works programme expenditure and non-monetized investment were not deflated.

5. *Savings* (*Table* 7)

   Total Savings are equal to investment minus foreign assistance as estimated by the Planning Commission.

   Public savings are equal to public investment minus all foreign assistance flowing through the public sector.

Non-corporate savings are adjusted I.D.E. estimates (*Pakistan Development Review*, Spring 1964). The adjustments consisted of: (i) removing duplication of postal savings and provident funds in line with the present definition of public savings, and (ii) adding non-monetized savings.

Corporate savings are derived as residuals.

6. *Composition of foreign exchange earnings* (*Table* 9)

The first two years are from the Statistical Yearbook of the C.S.O. The later two years are Planning Commission estimates.

7. *Composition of Imports* (*Table* 10)

1951 and 1956 are from *Economic Survey for Asia and the Far East*. The later two years are Planning Commission estimates. There are some differences in the terminology of the two sources quite apart from the non-inclusion of Government imports in the earlier two years.

8. *Population, labour force and urbanization* (*Table* 11)

Population—See 3 above.

Urbanization—Census ratios are more or less maintained (extrapolated for 1964).

Labour force—Total labour force estimated by using Census age-specific participation ratios. Broad sectoral division is based on Manpower Survey of 1956.

9. *Regional income* (*Table* 12)

1959-60 and 1963-64 are latest available C.S.O. estimates.

1949-50 is an earlier estimate of the Planning Commission adjusted to make it comparable with C.S.O. estimates (*see* footnote Table 12).

10. *Regional development expenditure* (*Table* 13)

Derived from relevant budgets. Where Central Government expenditure was not directly allocable, it was distributed roughly two-thirds to West and one-third to East Pakistan.

GPPK—416/25-68/S/64 P. C.—1-9-64—10,000.